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of Transportation
Federal Aviation
Administration

FAA Statistical Handbook of Aviation

Calendar Year 1992

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16. Abstract

This report presents statistical information pertaining to the Federal Aviation Administration, the National Airspace System, Airports, Airport Activity, U.S. Civil Air Carrier Fleet, U.S. Civil Air Carrier Operating Data, Airmen, General Aviation Aircraft, Aircraft Accidents, Aeronautical Production and Imports/Exports, and a Glossary of the terms used in this publication.

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PUBLICATION INFORMATION FOR PLANNING ANALYSIS DIVISION STATISTICS AND FORECAST BRANCH STATISTICS TEAM'S PUBLICATIONS

Below is a list of the publications compiled by the Office of Aviation, Policy, Plans, and Management Analysis; Planning Analysis Division; Statistics and Forecast Branch, Statistics Team. Questions may be directed to us by phone: (202) 267–3355, or by writing Federal Aviation Administration, Planning Analysis Division (APO–100) 800 Independence Avenue, S.W., Washington, DC 20591.

Airport Activity Statistics of Certificated Route Air Carrier is a joint publication of the Federal Aviation Administration (FAA) and the Research & Special Programs Administration (RSPA). RSPA furnishes airport activity data on certificated route air carriers; FAA organizes/publishes it. Included in the data are passenger enplanements, tons of enplaned freight and mail. Scheduled/nonscheduled service shown by airport and carrier are also included. Breakdown of data includes departures/enplanements/cargo/mail by airport, carrier & type of operation, and type of aircraft.

Reporting period:	Calendar Year
Latest edition:	1992 data
Order from:	U.S. Government Printing Office or National Technical Information Service
Date 1993 information will be available:	June 1994
Date next publication is scheduled:	September 1994 (1993 data)
Person to contact:	Patricia Beardsley

Census of U.S. Civil Aircraft is an annual publication that includes statistical data on the registered civil fleet, air carrier aircraft, and general aviation aircraft—both registered and active, detailed reports for general aviation aircraft by owner's state and county, and registered aircraft by make and model.

Reporting period:	Calendar Year
Latest edition:	1992 data
Order from:	U.S. Government Printing Office, or National Technical Information Service
Date 1993 information will be available:	March 1994
Date next publication is scheduled:	July 1994 (1993 data)
Person to contact:	Patricia Beardsley

FAA Air Traffic Activity furnishes terminal and en route air traffic activity information (e.g., takeoffs & landings, flight plans filed) of the National Airspace System. The data is collected/compiled from the FAA—operated Airport Traffic Control Towers, Air Route Traffic Control Centers, Flight Service Stations, Approach Control Facilities, and FAA Contract—towered airports.

Reporting period:	Fiscal Year
Latest edition:	1992 data
Order from:	U.S. Government Printing Office or National Technical Information Service
Date 1993 information will be available:	February 1994
Date next publication is scheduled:	July 1994 (1993 data)
Person to contact:	Nancy Trembley

FAA Statistical Handbook of Aviation is a convenient source for historical data. It presents statistical information pertaining to the Federal Aviation Administration, the National Airspace System, Airports, Airport Activity, U.S. Civil Air Carrier Fleet, U.S. Civil Air Carrier Operating Data, Airmen, General Aviation Aircraft, Aircraft Accidents, Aeronautical Production & Import/Export.

Reporting period:	Calendar Year
Latest edition:	1992 data
Order from:	U.S. Government Printing Office or National Technical Information Service
Date 1993 information will be available:	Various
Date next publication is scheduled:	December 1994 (1993 data)
Person to contact:	Patricia Beardsley

General Aviation Activity and Avionics Survey publication presents the results of the general aviation activity and avionics survey conducted to obtain information on the activity and avionics of the U.S. registered general aviation aircraft fleet. The survey reveals estimated flying time of the active general aviation aircraft, and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Estimates are included on fuel consumption, lifetime airframe hours, avionics, and engine hours.

Reporting period:	Calendar Year
Latest edition:	1992 data
Order from:	U.S. Government Printing Office or National Technical Information Service
Date 1992 information will be available:	August 1994
Date next publication is scheduled:	November 1994 (1993 data)
Person to contact:	Patricia Beardsley

Rotorcraft Activity Survey presents the results of a special one–time survey. The report contains breakdowns of active rotorcraft, annual flight hours, average flight hours, and other statistics by rotorcraft type, manufacture/model group, region and state of based aircraft, and primary use. Also included are law enforcement and public use rotorcraft, lifetime airframe hours, engine hours, estimated miles flown, and estimated number of landings.

Edition:	Calendar Year 1989
Order from:	Statistics & Forecast Branch or National Technical Information Service
Person to contact:	Patricia Beardsley

U.S. Civil Airmen Statistics is an annual study of detailed airmen statistics. It contains calendar year statistics on pilot and nonpilots and the number of certificates issued.

Latest edition:	Calendar Year 1992
Order from:	Statistics & Forecast Branch or National Technical Information Service
Date 1993 information will be available:	February 1994
Date next publication is scheduled:	April 1994 (1993 data)
Person to contact:	Patricia Beardsley

PREFACE

The FAA Statistical Handbook of Aviation is published annually by the Federal Aviation Administration (FAA). Its prime purpose is to serve as a convenient source for historical data and to assist in evaluating progress. The Handbook should provide a valuable source of information for the Department of Transportation (DOT), operating offices of the FAA, the Research and Special Programs Administration (RSPA), and other government agencies, as well as nongovernment organizations interested in aviation.

Chapter I deals with the FAA and its functions. This section also includes a comparison of the agency's appropriations and the agency's personnel complement.

National Airspace System data reflecting the fiscal and calendar year workload of the FAA air traffic facilities—terminal and en route are contained in Chapter II. This chapter contains air traffic activity reported by FAA-operated airport traffic control towers, air route traffic control centers, and flight service facilities

Selected statistics concerning the nation's airport facilities by state within FAA regions are presented in Chapter III. In addition to the total count of these facilities, this chapter includes statistics pertaining to the physical characteristics (paved vs. unpaved runways, lighted vs. unlighted runways, length of runways, etc.), and funds allocated for airport development.

Airline passenger, cargo, and freight statistics shown in Chapter IV were prepared from data published in *Airport Activity Statistics of Certificated Route Air Carriers,* which is issued jointly by the RSPA and the FAA. This chapter covers the activity of the large scheduled certificated U.S. air carriers only.

The U.S. civil air carrier fleet is described in detail in Chapter V. The aircraft population discussed here is not an inventory of the aircraft owned by the air carriers, but represents the aircraft reported in air carrier use during the last quarter of the year.

U.S. civil air carrier operating data—revenue passenger miles flown, available seat-miles, enplanements, revenue ton-miles flown, revenue aircraft miles flown, and operating revenues and expenses of the large certificated air carriers—are presented in Chapter VI. These statistics were obtained from forms submitted by the large certificated U.S. air carriers to the RSPA. Also included in Chapter VI are traffic statistics for the small certificated and commuter air carriers.

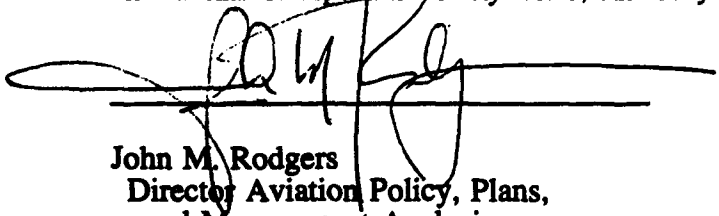
The airmen data shown in Chapter VII were obtained from official airmen certification records maintained by the FAA's Mike Monroney Aeronautical Center in Oklahoma City, Oklahoma. These data included the number of airmen as of the end of each year and the number of certificates issued during the year.

The general aviation aircraft data presented in Chapter VIII were collected from the General Aviation Activity and Avionics Survey. Numbers of active aircraft and hours flown are shown for each aircraft type, use category and state.

Aircraft accident information for air carriers, commuters, air taxis, and general aviation, appear in Chapter IX. These data were furnished by the National Transportation Safety Board (NTSB).

Aeronautical production and imports/exports are summarized in Chapter X. The production information was obtained from reports submitted to the U.S. Bureau of the Census by all known producers of complete aircraft and aircraft engines. Import/export data were obtained through Aerospace Industries Association, Inc. based on Bureau of the Census data from special monthly compilation of annual reports FT-446 and FT-410, respectively.

The FAA Statistical Handbook of Aviation is prepared by the Statistics and Forecast Branch, Planning Analysis Division, Office of Aviation Policy, Plans, and Management Analysis, with the cooperation of other FAA offices. Special appreciation is expressed to the Research and Special Programs Administration, U.S. Bureau of the Census, the National Transportation Safety Board, and many municipalities and private organizations for their assistance.



John M. Rodgers
Director Aviation Policy, Plans,
and Management Analysis

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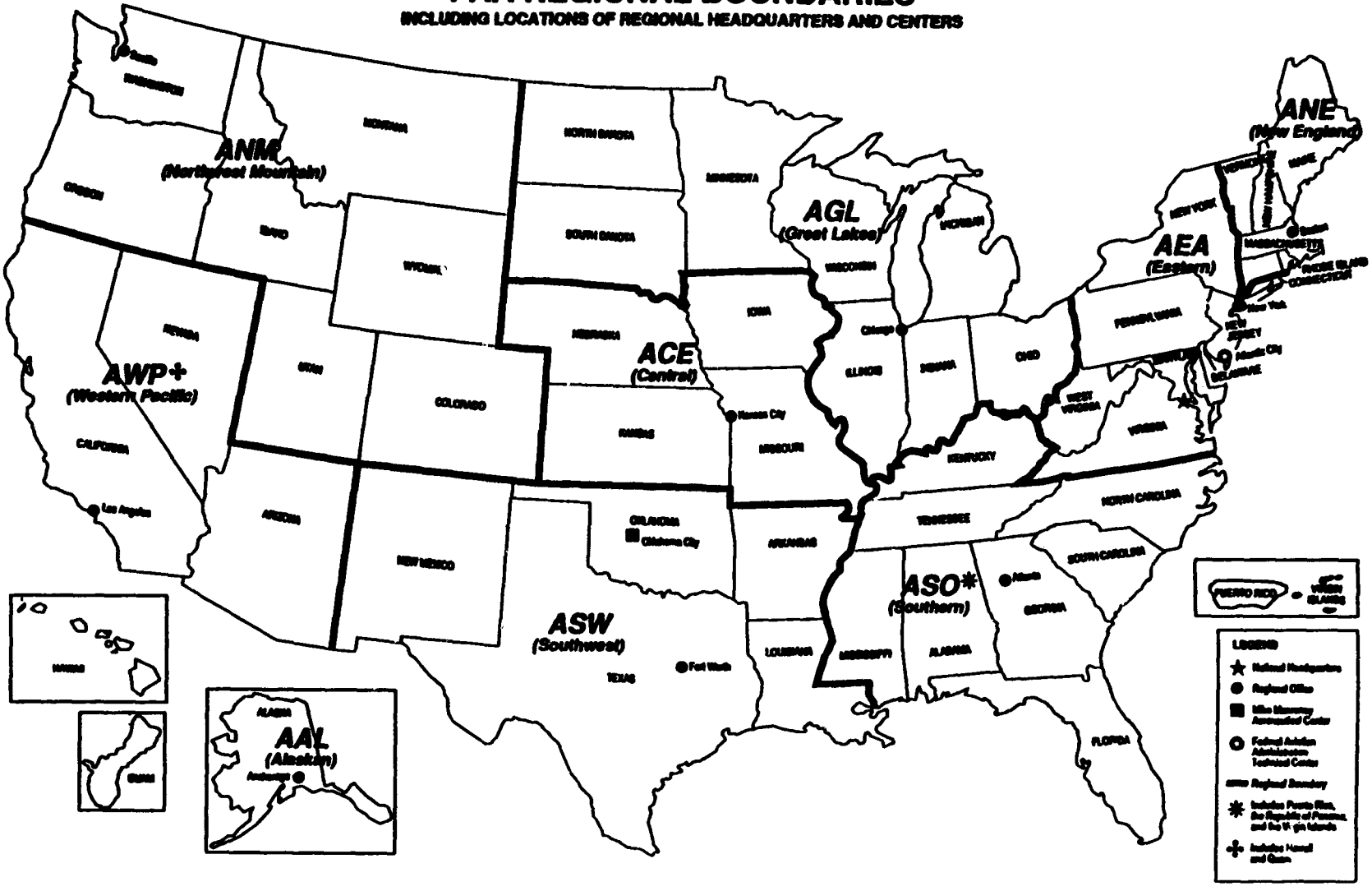
INCLUDING LOCATIONS OF REGIONAL HEADQUARTERS AND CENTERS



I. THE FEDERAL AVIATION ADMINISTRATION

The Department of Transportation Act of 1966 established a new executive department known as the Department of Transportation. The general welfare, economic growth, stability, and security of the nation pointed to the need for the development of national transportation policies and programs effectively using the nation's transportation resources. The Act provided for inclusion of the Federal Aviation Agency in the Department as the Federal Aviation Administration.

Directed by an Administrator, who is appointed by the President, by and with the advice and consent of the Senate, the FAA has as its primary function the fostering of the development and safety of American aviation. More specifically, the FAA is responsible for developing the major policies necessary to guide the long-range growth of civil aviation; modernizing the air traffic control system; establishing in a single authority the essential management functions necessary to support the common needs of civil and military operations; providing for the most effective and efficient use of the airspace over the United States; and for the rule making responsibilities relative to these functions.

The FAA constructs, operates, and maintains the National Airspace System and the facilities which are a part of the system; it allocates and regulates the use of the airspace; it ensures adequate separation between aircraft operating in controlled airspace; and, through research and development programs, it provides new systems and equipment for improving utilization of the nation's airspace.

The FAA prescribes and administers rules and regulations concerning airmen competency, aircraft airworthiness, and air traffic control. It promotes safety through certification of airmen, aircraft, and flight and aircraft maintenance schools. It reviews the design, structure, and performance of new aircraft to insure the safety of the flying public.

Services provided by FAA toward the development of aviation and air commerce include:

Dissemination of news and information on civil aviation generally.

Publication of flight information data for pilots.

Technical aviation assistance to other governments, operation of overseas civil aviation missions, and the aviation training of foreign nationals.

Development of medical standards for airmen through aviation medical research.

Research and development in the field of aeronautics and electronics.

Other activities required to encourage and foster the worldwide development of civil aviation and air commerce.

Policies governing these programs are developed in the Washington headquarters of FAA, and are executed by field employees.

The FAA has nine regional offices strategically located throughout the United States as well as the FAA Technical Center at Atlantic City, New Jersey, and the Mike Monroney Aeronautical Center at Oklahoma City, Oklahoma.

TABLE 1.1
FAA BUDGET AUTHORITY
FISCAL YEARS 1989–1993
($ IN MILLIONS)

Appropriation	1989	1990	1991	1992	1993
Total	**$6,589.5**	**$7,366.6**	**$7,937.7**	**$8,872.1**	**$9,167.9**
Operations (General Fund)	$2,974.0	$3,015.4	$2,034.3	$2,250.4	$2,258.6
Operations (Airport and Airway Trust Fund)	$471.3	$808.6	$2,003.0	$2,109.6	$2,279.3
Facilities and Equipment (Airport and Airway Trust Fund)	$1,384.2	$1,721.2	$2,095.4	$2,394.0	$2,350.0
Grants-in-Aid for Airports (Airport and Airway Trust Fund) Contract Authority	$1,600.0	$1,651.2	$1,600.0	$1,900.0	$2,050.0
(Obligation Limitation)	($1,399.0)	($1,422.0)	($1,834.5)	($1,900.0)	($1,800.0)
Research, Engineering and Development (Airport and Airway Trust Fund)	$160.0	$170.2	$205.0	$218.1	$230.0

TABLE 1.2
FAA CIVILIAN EMPLOYEES AT END OF FISCAL AND CALENDAR YEARS 1983–1992
(SEE NOTE BELOW)

Date	FAA Total Paid	Full Time Permanent			
		Washington Office	Washington Field	Other Field	Total
Sep-83	46,922	1,906	155	45,317	45,317
Dec-83	46,993	1,911	144	43,266	45,321
Sep-84	47,216	1,943	116	43,733	45,792
Dec-84	47,178	1,959	130	43,810	45,899
Sep-85	47,138	2,012	132	43,651	45,795
Dec-85	47,245	2,033	136	43,660	45,829
Sep-86	46,682	2,022	140	43,477	45,639
Dec-86	46,809	2,050	144	43,438	45,632
Sep-87	47,897	2,142	152	44,204	46,498
Dec-87	47,907	2,156	157	44,148	46,461
Sep-88	49,002	2,267	159	45,119	47,545
Dec-88	49,210	2,315	158	45,237	47,710
Sep-89	50,875	2,474	159	46,753	49,386
Dec-89	50,977	2,630	172	46,716	49,518
Sep-90	52,010	2,809	197	47,635	50,641
Dec-90	51,269	2,849	213	46,916	49,978
Sep-91	53,959	3,072	274	48,971	52,317
Dec-91	54,119	3,153	301	48,949	52,403
Sep-92	53,972	3,260	322	48,876	52,458
Dec-92	53,871	3,360	331	48,690	52,381

NOTE: FAA Total Paid includes full-time, part-time, and intermittent. Full time includes permanent paid full-time employees who occupy permanent positions.

Washington Office includes all paid Washington headquarters employees whise duty station is Washington, D.C.

Washington Field includes all paid Washington, D.C. employees in other states or foreign countries.

Other Field includes all paid employees whose duty stations are in the regions or centers.

TABLE 1.3
NUMBER OF TOTAL PAID FAA EMPLOYEES AS OF DECEMBER 31, 1983–1992

Occupation	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	**46,993**	**47,178**	**47,245**	**46,809**	**47,907**	**49,210**	**50,977**	**51,269**	**54,119**	**53,871**
Air Traffic Control Specialists	21,271	21,759	22,114	22,036	22,651	23,520	24,368	24,339	25,293	24,983
Electronics Technicians	7,633	7,229	6,856	6,600	6,788	6,627	6,508	6,458	6,641	6,572
Aviation Safety Inspectors	1,805	1,945	1,897	2,204	2,350	2,499	2,766	2,984	3,101	3,017
Engineers	2,313	2,419	2,450	2,417	2,579	2,640	2,657	2,736	3,073	3,208
All Others	13,971	13,826	13,928	13,552	13,539	13,924	14,678	14,752	16,011	16,091

II. THE NATIONAL AIRSPACE SYSTEM

This chapter furnishes terminal and en route air traffic activity information for the National Airspace System for fiscal and calendar years. The data have been reported by the FAA-operated Airport Traffic Control Towers, Air Route Traffic Control Centers, and flight service facilities (Flight Service Stations, Automated Flight Service Stations and International Flight Service Stations). These reports are used as a guide in determining the need for larger or additional facilities, and possible changes in the number of personnel at existing facilities.

Terminal information includes airport operations, instrument operations, and instrument approaches. Airport operations are landings and takeoffs. They are reported by towers by aviation categories--air carrier, air taxi, general aviation, and military. Instrument operations are takeoffs, landings, and overflights of aircraft operating in accordance with an IFR flight plan. Instrument approaches are approaches made to an airport by an aircraft on an IFR flight plan under IFR weather conditions.

Data for Air Route Traffic Control Centers (ARTCCs) include departures, overflights, and aircraft handled.

Activities for Flight Service Stations, Automated Flight Service Stations and International Flight Service Stations include flight plans originated, airport advisories, pilot briefs, and aircraft contacted.

More detailed data pertaining to activity of these facilities may be found in *FAA Air Traffic Activity*.

TABLE 2.1[1]
U.S. AIR ROUTE AIRWAY MILEAGE:
1982–1989
(Contiguous 48 States)

December 31	Very High Frequency VOR/VORTAC		
	Low Altitude		Jet Routes
	Direct	Alternate	
1982	167,637	20,067	138,438
1983	169,471	15,359	139,477
1984	171,873	12,188	141,199
1985	182,182	3,306	142,658
1986	184,229	905	146,869
1987	184,644	543	147,678
1988	185,166	543	149,057
1989	185,637	470	150,496
1990	No	longer	available
1991	No	longer	available
1992	No	longer	available

[1] Mileage shown in nautical miles based on National Ocean Survey figures.

TABLE 2.2
FAA AIR ROUTE FACILITIES AND SERVICES:
1983–1992

December 31	VOR/ VORTAC	Nondirectional Radio Beacons	Air Route Traffic Control Centers	Airport Traffic Control Towers	Flight Service Stations	International Flight Service Stations	Instrument Landing Systems	Radar Equipment
1983	1,032	1,183	25	494	316	5	934	197
1984	1,035	1,211	25	497	310	5	955	197
1985	1,039	1,222	25	500	302	4	968	198
1986	1,043	1,239	25	686	293	3	977	312
1987	1,045	1,262	25	686	253	3	1,111	312
1988	1,043	1,287	24	692	220	3	1,130	311
1989	1,044	1,263	24	693	199	3	1,147	312
1990	1,044	1,309	24	691	180	3	1,114	317
1991	1,044	1,323	24	692	175	3	1,186	318
1992	1,039[1]	1,335[2]	24[3]	690[4]	144[5]	2	1,212[6]	314[7]

[1] Includes 71 nonfederal and 37 military.
[2] Includes 965 nonfederal and 68 military.
[3] Includes 3 combined center/radar approach control facilities (CERAP).
[4] Includes 68 nonfederal and 201 military.
[5] Includes 55 Automated Flight Service Stations
[6] Includes 23 Landing Directional Aids (LDA), 175 nonfederal, 22 military, 214 partial, 5 Interim Microwave Landing Systems (ISMLS), and 28Simplified Direction Finders (SDF).
[7] Includes FAA, military and nonfederal

FISCAL YEARS

(TABLES 2.3–2.10)

TABLE 2.3
AIR TRAFFIC ACTIVITY AT AIR ROUTE TRAFFIC CONTROL CENTERS, BY AVIATION CATEGORY FISCAL YEARS 1988–1992

	Year	Aircraft Handled									
		Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
IFR	1992	36,728,538	1%	18,347,269	+[3]	5,864,392	5%	7,393,276	+[3]	5,123,601	-1%
Aircraft	1991	36,379,492	-3%	18,276,830	-1%	5,563,610	-1%	7,389,654	-7%	5,149,398	-5%
Handled[1]	1990	37,557,043	3%	18,545,718	6%	5,633,464	9%	7,931,305	-3%	5,446,556	-5%
	1989	36,617,064	1%	17,524,155	-2%	5,187,998	-11%	8,197,964	2%	5,706,947	25%
	1988	36,350,374	2%	17,885,859	5%	5,834,717	10%	8,053,133	-1%	4,576,665	-14%
IFR	1992	13,725,661	1%	6,180,967	-[3]	2,727,617	4%	3,067,703	-[3]	1,749,374	1%
Departures	1991	13,632,611	-3%	6,207,359	-2%	2,610,464	-1%	3,074,125	-7%	1,740,663	-5%
	1990	14,123,535	2%	6,348,263	5%	2,649,292	7%	3,299,757	-3%	1,826,223	-5%
	1989	13,856,587	+[3]	6,045,411	-2%	2,467,571	-10%	3,418,090	2%	1,925,515	24%
	1988	13,803,103	+[3]	6,146,443	2%	2,741,782	12%	3,355,842	-1%	1,559,036	-17%
IFR Overs[2]	1992	9,277,216	2%	5,985,335	2%	409,158	19%	1,257,870	1%	1,624,853	-3%
	1991	9,114,270	-2%	5,862,112	+[3]	342,682	2%	1,241,404	-7%	1,668,072	-7%
	1990	9,309,973	5%	5,849,192	8%	334,880	32%	1,331,791	-2%	1,794,110	-3%
	1989	8,903,890	2%	5,433,333	-3%	252,856	-28%	1,361,784	2%	1,855,917	27%
	1988	8,744,168	6%	5,592,973	11%	351,153	-4%	1,341,449	2%	1,458,593	-6%
	1987	8,257,869	7%	5,029,040	10%	365,839	5%	1,316,779	5%	1,546,211	2%

[1] The number of IFR Departures multiplied by two, plus the number of IFR Overs.
[2] Domestic plus oceanic overs.
[3] Less than 0.5 percent.

TABLE 2.4
AIR TRAFFIC ACTIVITY AT AIRPORT TRAFFIC CONTROL TOWERS, BY AVIATION CATEGORY FISCAL YEARS 1988–1992

	Year	Airport Operations									
		Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
Total Airport	1992	61,471,727	-[1]	12,435,044	-1%	9,307,272	5%	36,945,360	-2%	2,784,051	11%
Operations	1991	61,485,577	-3%	12,504,124	-3%	8,899,633	1%	37,578,303	-4%	2,503,517	-11%
	1990	63,668,880	4%	12,858,718	3%	8,837,671	7%	39,169,795	4%	2,802,696	1%
	1989	61,345,173	+[1]	12,519,891	-2%	8,296,725	1%	37,753,005	1%	2,775,552	-[1]
	1988	61,299,017	1%	12,752,997	-2%	8,255,279	12%	37,503,249	-1%	2,787,492	2%
Itinerant	1992	44,474,828	1%	12,435,044	-1%	9,307,272	5%	21,280,913	-1%	1451599	11%
Operations	1991	44,247,205	-3%	12,504,124	-3%	8,899,633	1%	21,538,486	-4%	1,304,962	-9%
	1990	45,609,732	3%	12,858,718	3%	8,837,671	7%	22,479,781	2%	1,433,562	1%
	1989	44,307,914	-[1]	12,519,891	-2%	8,296,725	1%	22,078,592	-[1]	1,412,706	-[1]
	1988	44,521,425	1%	12,752,997	-2%	8,255,279	12%	22,096,026	+[1]	1,417,123	3%
Local	1992	16,996,899	-1%	—	—	—	—	15,664,447	-2%	1,332,452	11%
Operations	1991	17,238,372	-5%	—	—	—	—	16,039,817	-4%	1,198,555	-12%
	1990	18,059,148	6%	—	—	—	—	16,690,014	6%	1,369,134	-[1]
	1989	17,037,259	2%	—	—	—	—	15,674,413	2%	1,362,846	-1%
	1988	16,777,592	-2%	—	—	—	—	15,407,223	-2%	1,370,369	1%

[1] Less than 0.5 percent.

TABLE 2.5
AIR TRAFFIC ACTIVITY AT FAA FACILITIES, BY AVIATION CATEGORY FISCAL YEARS 1988–1992

	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
Total Instrument Operations	1992	45,658,593	1%	13,450,145	-1%	9,895,443	5%	18,172,317	+[2]	4,140,688	4%
	1991	45,056,976	-4%	13,533,872	-3%	9,452,089	1%	18,101,326	-5%	3,969,689	-10%
	1990	46,866,201	4%	13,999,470	3%	9,382,285	9%	19,084,764	2%	4,399,682	4%
	1989	45,225,344	2%	13,567,597	1%	8,625,280	2%	18,794,460	3%	4,238,007	-4%
	1988	44,544,281	3%	13,422,772	-2%	8,449,004	15%	18,269,083	2%	4,403,422	-1%
Total Instrument Approaches	1992	2,477,052	20%	795,356	9%	637,871	22%	936,776	29%	107,049	18%
	1991	2,068,390	-3%	729,217	4%	524,734	-[2]	723,747	-11%	90,692	+[2]
	1990	2,130,532	-8%	703,116	-19%	525,242	3%	811,899	2%	90,275	-35%
	1989	2,308,880	21%	865,456	25%	509,982	14%	793,572	20%	139,870	25%
	1988	1,914,612	-17%	692,218	-20%	447,950	-7%	662,965	-19%	111,479	-17%
Total Instrument Approaches at Control Facilities[1]	1992	2,265,779	20%	783,014	9%	568,162	21%	821,881	32%	92,722	19%
	1991	1,888,680	-1%	716,160	4%	471,321	3%	623,178	-9%	78,021	5%
	1990	1,904,416	-10%	687,871	-19%	457,659	1%	684,641	-2%	74,045	-40%
	1989	2,126,745	23%	853,328	26%	452,821	20%	697,751	23%	122,845	24%
	1988	1,723,434	-19%	678,902	-20%	378,679	-11%	567,154	-22%	98,699	-20%
	1987	2,123,347	-11%	853,670	-14%	423,214	-4%	723,447	-13%	123,016	-3%

[1] Excludes instrument approaches provided by Air Route Traffic Control Centers.
[2] Less than 0.5 percent

TABLE 2.6
AIR TRAFFIC ACTIVITY AT FLIGHT SERVICE FACILITIES FISCAL YEARS 1988–1992

	Year	Flight Services[1]		Flight Plans Originated						Airport Advisories		Pilot Briefs	
		Total	Annual Change	Total	Annual Change	IFR–DVFR	Annual Change	VFR	Annual Change	Total	Annual Change	Total	Annual Change
Flight Service Stations & Automated Flight Service Stations	1992	39,734,200	-3%	6,436,661	-3%	4,834,776	-2%	1,601,885	-5%	1,284,261	-3%	10,663,101	-3%
	1991	41,056,343	-8%	6,607,763	-10%	4,921,277	-11%	1,686,486	-6%	1,317,795	-18%	11,031,195	-7%
	1990	44,583,131	-4%	7,317,145	-5%	5,531,253	-6%	1,785,892	-3%	1,603,503	-5%	11,807,920	-4%
	1989	46,591,219	1%	7,740,378	-2%	5,906,715	-2%	1,833,663	-2%	1,685,876	-14%	12,312,729	3%
	1988	46,317,697	-6%	7,870,389	-1%	5,999,828	-2%	1,870,561	+[2]	1,959,030	-19%	11,927,540	-8%
Flight Service Stations	1992	7,324,711	-14%	1,023,522	-14%	648,920	-16%	374,602	-11%	1,147,593	-2%	1,558,845	-18%
	1991	8,501,245	-38%	1,195,529	-41%	773,212	-43%	422,317	-38%	1,172,012	-18%	1,899,323	-41%
	1990	13,755,655	-26%	2,042,210	-28%	1,364,436	-33%	677,774	-16%	1,429,065	-9%	3,245,861	-29%
	1989	18,543,627	-19%	2,841,857	-21%	2,030,422	-23%	811,435	-17%	1,573,261	-15%	4,568,693	-19%
	1988	22,813,145	-28%	3,596,391	-26%	2,623,227	-28%	973,164	-17%	1,856,160	-19%	5,665,213	-31%
Automated Flight Service Stations	1992	32,409,489	-[2]	5,413,139	+[2]	4,185,856	1%	1,227,283	-3%	136,668	-6%	9,124,256	-[2]
	1991	32,555,096	6%	5,412,234	3%	4,148,065	-[2]	1,264,169	14%	145,783	-16%	9,131,872	7%
	1990	30,827,476	10%	5,274,935	8%	4,166,817	7%	1,108,118	8%	174,418	55%	8,562,059	11%
	1989	28,047,592	19%	4,898,521	15%	3,876,293	15%	1,022,228	14%	112,615	9%	7,724,036	23%
	1988	23,504,552	33%	4,273,998	36%	3,376,601	38%	897,397	30%	102,870	12%	6,262,327	31%

[1] The sum of flight plans originated and pilot briefs, multiplied by two, plus the number of aircraft contacted (see Table 2.7). No credit is allowed for airport advisories.
[2] Less than 0.5 percent.

TABLE 2.7
AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY FISCAL YEARS 1988–1992

	Year	Aircraft Contacted									
		Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
Flight Service	1992	5,494,676	-5%	196,582	-10%	783,127	-5%	4,129,578	-6%	383,389	6%
Stations &	1991	5,778,427	-9%	220,075	-13%	820,886	-3%	4,376,481	-9%	360,985	-17%
Automated	1990	6,333,001	-2%	252,571	-4%	849,578	-7%	4,795,332	-2%	435,520	-[1]
Flight Service	1989	6,485,005	-4%	263,352	-11%	911,322	-8%	4,873,102	-3%	437,229	2%
Stations	1988	6,721,839	-8%	297,071	-19%	988,294	-6%	5,008,210	-8%	428,264	-6%
IFR-DVFR	1992	1,649,377	-4%	191,122	-10%	386,459	-3%	924,917	-3%	146,879	-3%
	1991	1,710,367	-8%	211,858	-13%	396,702	-4%	950,630	-7%	151,177	-10%
	1990	1,851,559	-5%	243,883	-2%	414,334	-2%	1,024,750	-8%	168,592	-1%
	1989	1,949,051	2%	249,501	-13%	421,103	-2%	1,108,541	7%	169,906	9%
	1988	1,912,292	-8%	288,158	-16%	428,192	+[1]	1,039,447	-10%	156,495	-3%
VFR	1992	3,845,299	-5%	7,460	-9%	396,668	-6%	3,204,661	-6%	236,510	13%
	1991	4,068,060	-9%	8,217	-5%	424,184	-3%	3,425,851	-9%	209,808	-21%
	1990	4,481,442	-1%	8,688	-37%	435,244	-11%	3,770,582	+[1]	266,928	-[1]
	1989	4,535,954	-6%	13,851	55%	490,219	-12%	3,764,561	-5%	267,323	-2%
	1988	4,809,547	-8%	8,913	-61%	560,102	-10%	3,968,763	-7%	271,769	-7%
Flight	1992	2,159,977	-7%	91,513	-4%	477,926	-5%	1,453,086	-8%	137,452	1%
Service	1991	2,311,541	-27%	95,143	-20%	503,579	-21%	1,576,115	-29%	136,704	-34%
Stations	1990	3,179,513	-14%	118,593	-8%	635,276	-9%	2,217,319	-15%	208,325	-10%
	1989	3,682,527	-14%	129,560	-14%	701,557	-12%	2,618,735	-15%	232,675	-10%
	1988	4,289,937	-21%	150,807	-38%	795,897	-12%	3,085,556	-21%	257,677	-24%
IFR-DVFR	1992	564,091	-7%	84,545	-3%	210,956	-2%	222,477	-12%	46,113	-7%
	1991	605,313	-25%	87,536	-21%	215,408	-21%	252,998	-28%	49,371	-34%
	1990	810,335	-18%	110,378	-8%	272,156	-7%	352,616	-27%	75,185	-15%
	1989	983,475	-11%	120,569	-15%	293,704	-11%	481,049	-13%	88,153	-[1]
	1988	1,109,597	-25%	142,661	-36%	328,401	-8%	550,254	-31%	88,281	-22%
VFR	1992	1,595,886	-6%	6,968	-8%	266,970	-7%	1,230,609	-7%	91,339	5%
	1991	1,706,228	-28%	7,607	-7%	288,171	-21%	1,323,117	-29%	87,333	-34%
	1990	2,369,178	-12%	8,215	-9%	363,120	-11%	1,864,703	-13%	133,140	-8%
	1989	2,699,052	-15%	8,991	10%	407,853	-13%	2,137,686	-16%	144,522	-15%
	1988	3,180,340	-19%	8,146	-64%	467,496	-14%	2,535,302	-19%	169,396	-25%
Automated	1992	3,334,699	-4%	107,069	-14%	305,201	-4%	2,676,492	-4%	245,937	10%
Flight Service	1991	3,466,886	10%	124,932	-7%	317,307	48%	2,800,366	9%	224,281	-1%
Stations	1990	3,153,488	13%	133,978	+[1]	214,302	2%	2,578,013	14%	227,195	11%
	1989	2,802,478	15%	133,792	-9%	209,765	9%	2,254,367	17%	204,554	20%
	1988	2,431,902	30%	146,264	20%	192,397	31%	1,922,654	29%	170,587	47%
IFR-DVFR	1992	1,085,286	-2%	106,577	-14%	175,503	-3%	702,440	1%	100,766	-1%
	1991	1,105,054	6%	124,322	-7%	181,294	28%	697,632	4%	101,806	9%
	1990	1,041,224	8%	133,505	4%	142,178	12%	672,134	7%	93,407	14%
	1989	965,576	20%	128,932	-11%	127,399	28%	627,492	28%	81,753	20%
	1988	802,695	35%	145,497	21%	99,791	39%	489,193	37%	68,214	44%
VFR	1992	2,249,413	-5%	492	-19%	129,698	-5%	1,974,052	-6%	145,171	19%
	1991	2,361,832	12%	610	29%	136,013	89%	2,102,734	10%	122,475	-8%
	1990	2,112,264	15%	473	-90%	72,124	-12%	1,905,879	17%	133,788	9%
	1989	1,836,902	13%	4,860	534%	82,366	-11%	1,626,875	13%	122,801	20%
	1988	1,629,207	27%	767	-38%	92,606	24%	1,433,461	26%	102,373	49%

[1] Less than 0.5

TABLE 2.8
TOP 50 FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF TOTAL OPERATIONS AND BY AVIATION CATEGORY INCLUDING AIR CARRIER RANK
FISCAL YEAR 1992

Tower	Total		Air Carrier		Air Taxi	General Avation	Military
	Rank	Operations	Rank	Operations			
Chicago O'Hare Int'l, IL	1	838,093	1	618,936	174,724	41,126	3,307
Dallas Ft. Worth Reg'l, TX	2	763,372	2	571,260	175,338	15,793	981
Los Angeles Int'l, CA	3	678,398	4	407,152	193,419	63,675	13,952
Atlanta Int'l, GA	4	611,889	3	439,707	148,032	19,667	4,483
Santa Ana/Orange County, CA	5	557,442	56	61,887	27,978	466,982	595
Van Nuys, CA	6	530,337	N/A	0	660	529,199	478
Denver Stapleton Int'l, CO	7	499,001	5	316,128	149,913	31,580	1,380
Phoenix Sky Harbor Int'l, AZ	8	487,615	6	300,352	72,710	104,931	9,622
Miami Int'l, FL	9	486,222	11	274,964	126,034	75,569	9,655
Boston Logan, MA	10	482,582	15	242,253	207,689	31,954	686
Charlotte Douglas, NC	11	466,351	13	264,170	130,185	66,636	5,360
Long Beach, CA	12	431,835	104	16,846	4,135	408,598	2,256
St. Louis Int'l, MO	13	429,473	12	273,790	110,151	36,502	9,030
San Francisco, CA	14	424,829	7	296,904	92,850	32,656	2,419
Pittsburgh Greater Int'l, PA	15	421,903	9	280,605	116,642	19,958	4,698
Oakland Int'l, CA	16	419,233	38	107,669	51,982	258,642	940
Seattle Boeing, WA	17	414,341	155	5,918	28,017	376,324	4,082
Honolulu, HI	18	413,725	20	201,999	59,984	119,896	31,846
Detroit Metro Wayne, MI	19	413,544	10	277,880	83,788	49,804	2,072
Las Vegas McCarran, NV	20	407,668	21	201,688	95,365	103,513	7,102
Minneapolis/St. Paul Int'l, MN	21	404,243	16	241,984	80,128	79,139	2,992
Newark, NJ	22	403,978	8	283,651	99,125	20,730	472
Philadelphia Int'l, PA	23	377,033	19	204,628	120,609	45,543	6,253
Denver Centennial, CO	24	371,478	N/A	0	4,876	358,174	8,428
Pontiac, MI	25	348,645	225	178	12,346	335,289	832
Seattle-Tacoma, WA	26	346,160	23	194,776	141,933	9,159	312
Memphis Int'l, TN	27	344,655	25	165,445	114,130	59,524	5,556
San Jose Int'l, CA	28	342,918	40	95,874	55,792	190,205	1,047
La Guardia, NY	29	337,279	14	254,848	65,356	16,754	321
John F Kennedy, NY	30	328,528	18	205,689	106,262	16,111	466
Fort Worth Meacham, TX	31	325,212	220	353	828	323,317	714
Houston Intercontinental, TX	32	320,243	17	218,906	56,857	42,473	2,007
Salt Lake City Int'l, UT	33	316,783	26	159,920	67,725	83,772	5,366
Daytona Beach, FL	34	312,701	116	13,173	7,257	291,222	1,049
Washington National, DC	35	312,014	24	183,722	71,319	56,443	530
Cincinnati Greater, KY	36	304,214	27	151,969	139,412	11,650	1,183
Nashville Metropolitan, TN	37	302 030	28	132,715	102,921	59,891	6,503
Orlando Int'l, FL	38	294 17	22	201,452	64,918	23,229	4,788
Concord, CA	39	291,613	N/A	0	1,262	289,432	919
Raleigh Durham, NC	40	289,462	35	119,964	88,995	71,220	9,283
Tamiami, FL	41	287,831	N/A	0	602	280,665	6,564
Washington Dulles Int'l, VA	42	287,111	37	108,317	116,066	54,968	7,760
Prescott, AZ	43	285,914	N/A	0	8,556	276,849	509
Portland, OR	44	269,445	43	89,014	105,966	60,628	13,837
Baltimore Washington Int'l, MD	45	265,844	30	128,648	85,862	47,830	3,504
Tulsa Riverside, OK	46	265,809	N/A	0	16	265,787	6
La Verne Brackett, CA	47	251,131	N/A	0	1,557	249,300	274
Indianapolis, IN	48	247,553	31	122,249	73,322	50,431	1,551
Livermore, CA	49	246,838	N/A	0	467	245,239	1,132
Houston Hobby, TX	50	242,999	34	120,084	11,286	110,193	1,436

NA Not applicable.
NOTE: Total Operations rank was based on total air traffic activity at 401 FAA-Operated Towers. Air Carrier operations rank was based on air carrier activity at 296 FAA-Operated Towers. Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.9
TOP 50 FAA–OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF AIR CARRIER OPERATIONS AND BY AVIATION CATEGORY INCLUDING TOTAL OPERATIONS RANK FISCAL YEAR 1992

Tower	Air Carrier		Air Taxi	General Avation	Military	Total	
	Rank	Operations				Rank	Operations
Chicago O'Hare Int'l, IL	1	618,936	174,724	41,126	3,307	1	838,093
Dallas Ft. Worth Reg'l, TX	2	571,260	175,338	15,793	981	2	763,372
Atlanta Int'l, GA	3	439,707	148,032	19,667	4,483	4	611,889
Los Angeles Int'l, CA	4	407,152	193,419	63,875	13,952	3	678,398
Denver Stapleton Int'l, CO	5	316,128	149,913	31,580	1,380	7	499,001
Phoenix Sky Harbor Int'l, AZ	6	300,352	72,710	104,931	9,622	8	487,615
San Francisco, CA	7	296,904	92,850	32,656	2,419	14	424,829
Newark, NJ	8	283,651	99,125	20,730	472	22	403,978
Pittsburgh Greater Int'l, PA	9	280,605	116,642	19,958	4,698	15	421,903
Detroit Metro Wayne, MI	10	277,880	83,788	49,804	2,072	19	413,544
Miami Int'l, FL	11	274,984	126,034	75,569	9,655	9	486,222
St. Louis Int'l, MO	12	273,790	110,151	36,502	9,030	13	429,473
Charlotte Douglas, NC	13	264,170	130,185	66,636	5,360	11	466,351
La Guardia, NY	14	254,848	65,356	16,754	321	29	337,279
Boston Logan, MA	15	242,253	207,689	31,954	686	10	482,582
Minneapolis/St. Paul Int'l, MN	16	241,984	80,128	79,139	2,992	21	404,243
Houston Intercontinental, TX	17	218,906	56,857	42,473	2,007	32	320,243
John F Kennedy, NY	18	205,689	106,262	16,111	466	30	328,528
Philadelphia Int'l, PA	19	204,628	120,609	45,543	6,253	23	377,033
Honolulu, HI	20	201,999	59,984	119,896	31,846	18	413,725
Las Vegas McCarran, NV	21	201,688	95,365	103,513	7,102	20	407,668
Orlando Int'l, FL	22	201,452	64,918	23,229	4,788	38	294,387
Seattle-Tacoma, WA	23	194,776	141,933	9,159	312	26	346,180
Washington National, DC	24	183,722	71,319	56,443	530	35	312,014
Memphis Int'l, TN	25	165,445	114,130	59,524	5,556	27	344,655
Salt Lake City Int'l, UT	26	159,920	67,725	83,772	5,366	33	316,783
Cincinnati Greater, KY	27	151,969	139,412	11,650	1,183	36	304,214
Nashville Metropolitan, TN	28	132,715	102,921	59,891	6,503	37	302,030
San Diego Lindberg, CA	29	132,701	54,138	22,797	5,208	72	214,844
Baltimore Washington Int'l, MD	30	128,648	85,862	47,830	3,504	45	265,844
Indianapolis, IN	31	122,249	73,322	50,431	1,551	48	247,553
Cleveland Hopkins, OH.	32	122,026	80,467	31,660	3,063	55	237,216
Tampa Int'l, FL	33	120,479	58,170	48,323	2,498	61	229,470
Houston Hobby, TX	34	120,084	11,286	110,193	1,436	50	242,999
Raleigh Durham, NC	35	119,964	88,995	71,220	9,283	40	289,462
Kansas City Int'l. MO	36	110,356	49,265	15,502	1,631	118	176,754
Washington Dulles Int'l, VA	37	108,317	116,066	54,968	7,760	42	287,111
Oakland Int'l, CA	38	107,669	51,962	258,642	940	16	419,233
Anchorage Int'l, AK	39	98,226	82,725	52,027	3,741	57	236,719
San Jose Int'l, CA	40	95,874	55,792	190,205	1,047	28	342,918
Ontario, CA	41	92,506	29,399	30,584	446	152	152,935
Dallas Love Field, TX	42	89,174	24,110	97,408	1,357	75	212,049
Portland, OR	43	89,014	105,966	60,628	13,837	44	269,445
New Orleans Moisant, LA	44	88,579	23,483	23,246	2,065	178	137,373
Louisville Standiford, KY	45	83,553	27,637	38,505	6,388	147	156,083
Fort Lauderdale, FL	46	83,157	45,128	74,474	1,424	81	204,183
San Antonio Int'l, TX	47	76,495	23,840	103,846	5,882	78	210,063
Milwaukee Mitchell, WI	48	74,545	56,727	63,900	7,114	86	202,286
Port Columbus, OH	49	74,081	55,814	90,563	4,140	67	224,598
San Juan, PR	50	71,408	92,253	35,717	6,182	80	205,560

NOTE: Total Operations rank was based on total air traffic activity at 401 FAA-Operated Towers. Air Carrier operations rank was based on air carrier activity at 298 FAA-Operated Towers. Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.10
TOTAL FAA AIR TRAFFIC ACTIVITY BY REGION AND STATE, AND BY FAA-OPERATED TOWERS,AIR ROUTE TRAFFIC CONTROL CENTERS, FLIGHT SERVICE STATIONS, AND INTERNATIONAL FLIGHT SERVICE STATIONS
FISCAL YEAR 1992

FAA Region and State	Airport Operations (Towers)	Aircraft Handled (Centers)	Aircraft Contacted (Flight Service Stations)*	Total Flight Services (Flight Service Station)*
TOTAL	**61,471,727**	**36,728,538**	**5,494,676**	**39,734,200**
Alaskan—Total	**1,103,903**	**507,968**	**907,205**	**2,049,153**
Central—Total	**2,337,902**	**1,755,884**	**280,893**	**2,778,547**
Iowa	414,816	—	45,909	510,391
Kansas	474,558	—	55,909	538,101
Missouri	1,168,556	1,755,884	128,679	1,360,987
Nebraska	279,972	—	50,396	369,068
Eastern—Total	**8,022,845**	**4,161,183**	**431,444**	**4,929,430**
Delaware	169,646	—	—	—
District of Columbia	312,014	2,212,032	81,430	874,298
Maryland	477,715	—	56,338	103,992
New Jersey	1,290,348	—	54,577	717,741
New York	2,434,915	1,949,151	66,415	1,072,075
Pennsylvania	1,889,120	—	91,704	1,600,754
Virginia	1,079,582	—	12,679	172,107
West Virginia	369,505	—	68,301	388,463
Great Lakes—Total	**9,161,683**	**8,634,362**	**611,773**	**6,264,787**
Illinois	2,523,995	2,552,868	63,424	937,082
Indiana	806,986	1,911,845	67,629	785,751
Michigan	2,013,665	—	62,991	1,018,481
Minnesota	1,054,328	1,773,721	112,104	793,868
North Dakota	425,956	—	43,348	433,302
Ohio	1,311,232	2,395,928	74,143	1,208,535
South Dakota	163,542	—	101,394	382,132
Wisconsin	861,979	—	86,740	705,636
New England—Total	**3,013,820**	**1,590,450**	**131,401**	**1,724,249**
Connecticut	755,100	—	62,407	905,605
Maine	230,076	—	30,705	382,593
Massachusetts	1,589,399	1,590,450	—	—
New Hampshire	171,179	—	—	—
Rhode Island	146,937	—	—	—
Vermont	121,129	—	38,289	436,051
Northwest Mountain—Total	**5,511,628**	**4,068,926**	**738,857**	**3,547,033**
Colorado	1,459,153	1,393,692	130,482	781,452
Idaho	409,425	—	44,188	225,462
Montana	304,510	—	137,654	395,306
Oregon	974,675	—	108,589	535,609
Utah	413,734	1,379,488	64,095	312,817
Washington	1,838,586	1,295,746	181,559	1,036,325
Wyoming	111,545	—	72,290	260,062
Southern—Total	**11,467,143**	**7,511,075**	**1,089,306**	**9,092,202**
Alabama	605,450	—	101,111	771,195
Florida	5,381,208	3,423,974	399,434	3,331,748
Georgia	1,344,690	2,221,418	94,431	1,154,027
Kentucky	722,226	—	85,790	518,240
Mississippi	287,331	—	38,692	377,656
North Carolina	1,229,949	—	138,085	1,103,423
Puerto Rico	328,780	—	64,482	243,932
South Carolina	424,252	—	52,694	618,258
Tennessee	963,139	1,865,683	114,587	973,723
Virgin Islands	180,118	—	—	—
Southwest—Total	**6,804,053**	**4,996,551**	**580,291**	**4,705,731**
Arkansas	339,566	—	59,456	475,460
Louisiana	989,083	—	32,186	503,074
New Mexico	396,655	1,359,039	139,160	552,386
Oklahoma	793,440	—	87,435	653,681
Texas	4,285,309	3,637,512	262,054	2,521,130
Western-Pacific—Total	**14,048,750**	**3,502,139**	**723,506**	**4,643,068**
American Samoa	10,668	—	—	—
Arizona	2,014,823	—	123,797	665,109
California	10,392,278	3,405,030	506,817	3,376,669
Guam	—	97,109	—	—
Hawaii	905,074	—	40,091	220,529
Nevada	707,686	—	52,801	380,761
Wake Island	18,221	—	—	—

*Includes domestic and international Flight Service Stations

CALENDAR YEARS

(TABLES 2.11–2.18)

TABLE 2.11
AIR TRAFFIC ACTIVITY AT AIR ROUTE TRAFFIC CONTROL CENTERS, BY AVIATION CATEGORY CALENDAR YEARS 1988–1992

	Year	Aircraft Handled									
		Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
IFR Aircraft Handled[1]	1992	36,951,044	2%	18,529,347	2%	5,934,623	6%	7,409,110	-*	5,077,964	-*
	1991	36,210,791	-4%	18,091,513	-3%	5,604,346	-1%	7,414,483	-5%	5,100,449	-5%
	1990	37,541,831	2%	18,739,431	6%	5,647,553	7%	7,766,547	-4%	5,388,300	-5%
	1989	36,704,773	1%	17,600,768	-2%	5,284,042	-7%	8,126,818	1%	5,693,145	19%
	1988	36,383,294	1%	17,869,355	2%	5,662,629	5%	8,066,715	-*	4,784,595	-8%
IIFR Departures	1992	13,802,389	2%	6,219,223	1%	2,757,905	5%	3,072,441	-*		
	1991	13,559,081	-4%	6,133,980	-4%	2,621,486	-1%	3,085,376	-5%	1,718,239	-6%
	1990	14,108,481	2%	6,396,281	5%	2,656,659	6%	3,232,788	-5%	1,820,753	-4%
	1989	13,854,290	+*	6,065,044	-1%	2,499,739	-6%	3,386,246	1%	1,903,261	17%
	1988	13,788,054	-1%	6,126,722	-*	2,671,994	6%	3,358,945	-1%	1,630,393	-11%
IFR Overs[2]	1992	9,346,266	3%	6,090,901	5%	418,813	16%	1,264,228	2%	1,572,324	-6%
	1991	9,092,629	-3%	5,823,553	-2%	361,374	9%	1,243,731	-4%	1,663,971	-5%
	1990	9,324,869	4%	5,946,869	9%	330,235	16%	1,300,971	-4%	1,746,794	-7%
	1989	8,996,193	2%	5,470,680	-3%	284,564	-11%	1,354,326	+*	1,886,623	24%
	1988	8,807,186	5%	5,615,911	9%	318,641	-8%	1,348,825	2%	1,523,809	-*

*less than 0.5 percent.
[1] The number of IFR Departures multiplied by two, plus the number of IFR Overs.
[2] Domestic plus oceanic overs

TABLE 2.12
AIR TRAFFIC ACTIVITY AT AIRPORT TRAFFIC CONTROL TOWERS, BY AVIATION CATEGORY CALENDAR YEARS 1988–1992

	Year	Airport Operations									
		Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
Total Airport Operations	1992	61,342,974	1%	12,475,379	1%	9,401,703	6%	36,681,189	-1%	2,784,703	11%
	1991	60,844,288	-5%	12,336,595	-5%	8,911,100	-1%	37,084,478	-6%	2,512,115	-9%
	1990	63,962,781	4%	12,948,295	4%	8,968,697	7%	39,297,710	4%	2,748,079	-1%
	1989	61,321,964	-*	12,484,530	-2%	8,356,587	+*	37,713,390	+*	2,767,457	-2%
	1988	61,537,927	1%	12,741,239	-3%	8,315,411	10%	37,669,713	+*	2,811,564	1%
Itinerant Operations	1992	44,455,692	1%	12,475,379	1%	9,401,703	6%	21,128,552	-1%	1,450,058	10%
	1991	43,833,165	-4%	12,336,595	-5%	8,911,100	-1%	21,267,456	-6%	1,318,014	-7%
	1990	45,842,637	4%	12,948,295	4%	8,968,697	7%	22,508,515	2%	1,417,130	+*
	1989	44,261,015	-1%	12,484,530	-2%	8,356,587	+*	22,006,509	-1%	1,413,389	-*
	1988	44,659,108	1%	12,741,239	-3%	8,315,411	10%	22,188,943	1%	1,413,515	1%
Local Operations	1992	16,887,282	-1%	—	—	—	—	15,552,637	-2%	1,334,645	12%
	1991	17,011,123	-6%	—	—	—	—	15,817,022	-6%	1,194,101	-10%
	1990	18,120,144	6%	—	—	—	—	16,789,195	7%	1,330,949	-2%
	1989	17,060,949	1%	—	—	—	—	15,706,881	1%	1,354,068	-3%
	1988	16,878,819	-1%	—	—	—	—	15,480,770	-1%	1,398,049	1%

*Less than 0.5 percent.

TABLE 2.13
AIR TRAFFIC ACTIVITY AT FAA FACILITIES, BY AVIATION CATEGORY CALENDAR YEARS 1988–1992

	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
Total Instrument Operations	1992	45,707,585	2%	13,508,463	1%	10,033,792	6%	18,051,699	+*	4,113,631	3%
	1991	44,822,166	-4%	13,332,196	-5%	9,484,368	+*	18,025,688	-5%	3,979,914	-7%
	1990	46,935,150	4%	14,103,619	4%	9,538,773	11%	18,995,944	2%	4,296,814	-1%
	1989	45,055,648	+*	13,501,139	+*	8,598,447	1%	18,631,727	1%	4,324,335	-3%
	1988	44,858,714	2%	13,477,165	-2%	8,540,039	13%	18,402,606	2%	4,438,904	-*
Total Instrument Approaches	1992	2,625,178	18%	864,772	15%	682,986	22%	964,275	19%	113,145	17%
	1991	2,216,704	7%	753,124	7%	558,540	8%	807,926	6%	97,114	11%
	1990	2,074,931	-12%	703,607	-19%	520,655	-2%	762,782	-7%	87,887	-34%
	1989	2,354,303	29%	871,457	36%	530,050	25%	819,829	26%	132,967	18%
	1988	1,830,121	-12%	641,592	-20%	424,490	-8%	651,689	-8%	112,350	-3%
Total Instrument Approaches at Control Facilities[1]	1992	2,422,484	20%	851,880	15%	615,663	23%	856,394	23%	98,547	17%
	1991	2,021,138	9%	740,355	8%	499,869	9%	696,581	8%	84,333	16%
	1990	1,863,106	-14%	688,772	-20%	458,004	-3%	643,345	-11%	72,985	-37%
	1989	2,171,464	32%	858,637	36%	474,600	32%	722,910	30%	115,317	17%
	1988	1,644,854	-14%	629,719	-20%	358,630	-9%	557,759	-9%	98,746	-6%

*Less than 0.5 percent.
[1] Excludes instrument approaches provided by Air Route Traffic Control Centers.

TABLE 2.14
AIR TRAFFIC ACTIVITY AT FLIGHT SERVICE FACILITIES CALENDAR YEARS 1988–1992

	Year	Flight Services[1]		Flight Plans Originated						Airport Advisories		Pilot Briefs	
		Total	Annual Change	Total	Annual Change	IFR–DVFR	Annual Change	VFR	Annual Change	Total	Annual Change	Total	Annual Change
Flight Service Stations & Automated Flight Service Stations	1992	39,430,634	-3%	6,400,202	-2%	4,824,601	-2%	1,575,601	-4%	1,265,832	-2%	10,604,514	-3%
	1991	40,691,408	-7%	6,542,483	-8%	4,901,883	-8%	1,640,600	-8%	1,293,076	-16%	10,965,209	-5%
	1990	43,696,478	-5%	7,125,915	-7%	5,341,443	-9%	1,784,472	-1%	1,546,810	-7%	11,602,109	-5%
	1989	46,211,404	+*	7,660,484	-2%	5,861,441	-2%	1,799,043	-4%	1,666,269	-11%	12,227,038	3%
	1988	46,019,119	-4%	7,851,587	-1%	5,984,825	-1%	1,866,762	-1%	1,870,995	-19%	11,844,172	-6%
Flight Service Stations	1992	7,073,294	-12%	980,500	-13%	618,078	-15%	362,422	-9%	1,132,522	-1%	1,497,238	-16%
	1991	8,076,751	-38%	1,128,013	-41%	729,313	-41%	398,700	-40%	1,148,921	-18%	1,787,447	-41%
	1990	12,974,279	-26%	1,902,848	-29%	1,241,564	-35%	661,284	-15%	1,398,230	-10%	3,051,713	-30%
	1989	17,612,149	-18%	2,681,048	-21%	1,899,287	-23%	781,761	-16%	1,544,788	-13%	4,337,302	-19%
	1988	21,550,269	-28%	3,391,173	-27%	2,461,373	-28%	929,800	-21%	1,772,066	-22%	5,327,830	-31%
Automated Flight Service Stations	1992	32,357,340	-1%	5,419,702	+*	4,206,523	1%	1,213,179	-2%	133,310	-8%	9,107,276	-1%
	1991	32,614,657	6%	5,414,470	4%	4,172,570	2%	1,241,900	11%	144,155	-4%	9,177,762	7%
	1990	30,722,199	7%	5,223,067	5%	4,099,879	3%	1,123,188	10%	150,560	24%	8,550,396	3%
	1989	28,599,255	17%	4,979,436	12%	3,962,154	12%	1,017,282	9%	121,481	23%	7,889,736	21%
	1988	24,468,850	35%	4,460,414	35%	3,523,452	36%	936,962	33%	98,929	91%	6,516,542	34%

[1] The sum of flight plans originated and pilot briefs, multiplied by two, plus the number of aircraft contacted (see Table 2.15). No credit is allowed for airport advisories.
*Less than 0.5 percent.

TABLE 2.15
AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY CALENDAR YEARS 1988–1992

	Year	Aircraft Contacted									
		Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
Flight Service	1992	5,421,202	-4%	197,681	-7%	782,962	-3%	4,067,751	-5%	372,808	4%
Stations &	1991	5,676,024	-9%	212,396	-15%	809,282	-4%	4,297,100	-9%	357,246	-16%
Automated	1990	6,240,430	-3%	249,076	-4%	845,738	-6%	4,718,219	-3%	427,397	-2%
Flight Service	1989	6,436,360	-3%	260,602	-6%	899,292	-7%	4,840,370	-2%	436,096	4%
Stations	1988	6,627,601	-7%	278,690	-21%	965,234	-6%	4,963,352	-6%	420,325	-9%
IFR-DVFR	1992	1,664,791	-2%	190,070	-7%	391,521	+*	940,617	-1%	142,583	-5%
	1991	1,699,378	-7%	204,464	-15%	391,268	-6%	953,058	-5%	150,588	-9%
	1990	1,821,572	-6%	240,495	-3%	415,896	-1%	1,000,296	-9%	164,885	-3%
	1989	1,937,844	3%	247,045	-9%	419,796	-*	1,100,250	7%	170,753	9%
	1988	1,879,163	-6%	270,894	-18%	421,332	-*	1,030,019	-5%	156,918	-3%
VFR	1992	3,756,411	-6%	7,611	-4%	391,441	-6%	3,127,134	-6%	230,225	11%
	1991	3,976,646	-10%	7,932	-8%	418,014	-3%	3,344,042	-10%	206,658	-21%
	1990	4,418,858	-2%	8,581	-37%	429,842	-10%	3,717,923	-1%	262,512	-1%
	1989	4,498,516	-5%	13,557	74%	479,496	-12%	3,740,120	-5%	265,343	1%
	1988	4,748,438	-7%	7,796	-64%	543,902	-9%	3,933,333	-6%	263,407	-13%
Flight	1992	2,117,818	-6%	90,916	-2%	472,539	-4%	1,422,188	-7%	132,175	-*
Service	1991	2,245,831	-27%	92,562	-21%	493,152	-20%	1,527,487	-28%	132,630	-33%
Stations	1990	3,065,157	-14%	117,062	-8%	619,263	-10%	2,132,187	-16%	196,645	-14%
	1989	3,575,449	-13%	127,538	-8%	691,285	-11%	2,528,557	-14%	228,069	-7%
	1988	4,112,663	-22%	138,912	-40%	773,241	-12%	2,954,140	-23%	246,370	-28%
IFR-DVFR	1992	559,367	-5%	83,974	-1%	210,610	+*	220,921	-10%	43,862	-9%
	1991	588,243	-24%	85,199	-22%	210,071	-20%	244,546	-26%	48,427	-31%
	1990	773,288	-19%	108,924	8%	263,335	-9%	331,305	-28%	69,724	-19%
	1989	953,344	-10%	118,859	-10%	288,589	-10	459,502	-12%	86,394	-*
	1988	1,061,062	-24%	131,579	-37%	320,304	-9%	522,493	-28%	86,686	-22%
VFR	1992	1,558,451	-6%	6,942	-6%	261,929	-7%	1,201,267	-6%	88,313	5%
	1991	1,657,588	-28%	7,363	-10%	283,081	-20%	1,282,941	-29%	84,203	-34%
	1990	2,291,869	-13%	8,138	-6%	355,928	-12%	1,800,882	-13%	126,921	-10%
	1989	2,622,105	-14%	8,679	18%	402,696	-11%	2,069,055	-15%	141,675	-11%
	1988	3,051,601	-22%	7,333	-64%	452,937	-14%	2,431,647	-22%	159,684	-31%
Automated	1992	3,303,384	-4%	106,765	-11%	310,423	-2%	2,645,563	-4%	240,633	7%
Flight Service	1991	3,430,193	8%	119,834	-9%	316,130	40%	2,769,613	7%	224,616	-3%
Stations	1990	3,175,273	11%	132,014	-1%	226,475	9%	2,586,032	12%	230,752	11%
	1989	2,860,911	14%	133,064	-5%	208,007	8%	2,311,813	15%	208,027	20%
	1988	2,514,938	37%	139,778	13%	191,993	34%	2,009,212	38%	173,955	44%
IFR-DVFR	1992	1,105,424	-1%	106,096	-11%	180,911	-*	719,696	2%	98,721	-3%
	1991	1,111,135	6%	119,265	-9%	181,197	19%	708,512	6%	102,161	7%
	1990	1,048,284	6%	131,571	3%	152,561	16%	668,991	4%	95,161	13%
	1989	984,500	20%	128,186	-8%	131,207	30%	640,748	26%	84,359	20%
	1988	818,101	36%	139,315	14%	101,028	42%	507,526	42%	70,232	41%
VFR	1992	2,197,960	-5%	669	18%	129,512	-4%	1,925,867	-7%	141,912	16%
	1991	2,319,058	9%	569	28%	134,933	83%	2,061,101	8%	122,455	-10%
	1990	2,126,989	13%	443	-91%	73,914	-4%	1,917,041	15%	135,591	10%
	1989	1,876,411	11%	4,878	954%	76,800	-16%	1,671,065	11%	123,668	19%
	1988	1,696,837	37%	463	-54%	90,965	27%	1,501,686	37%	103,723	46%

*Less than 0.5

TABLE 2.16
TOP 50 FAA–OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF TOTAL OPERATIONS AND BY AVIATION CATEGORY INCLUDING AIR CARRIER RANK
CALENDAR YEAR 1992

Tower	Rank	Total Operations	Rank	Air Carrier	Air Taxi	General Aviation	Military
Chicago O'Hare Int'l, IL	1	845,211	1	620,992	181,906	39,111	3,202
Dallas Ft. Worth Regional, TX	2	764,295	2	572,862	175,021	15,425	987
Los Angeles Int'l, CA	3	680,489	4	409,122	191,315	66,179	13,873
Atlanta Int'l, GA	4	621,640	3	447,095	149,005	21,152	4,388
Santa Ana/Orange Co. , CA	5	548,710	56	61,936	28,667	457,363	744
Van Nuys, CA	6	520,468	N/A	0	661	519,313	494
Denver Stapleton Int'l, CO	7	512,497	5	323,007	155,084	32,953	1,453
Miami Int'l, FL	8	496822	11	281,535	124,020	80,934	10,333
Phoenix Sky Harbor Int'l, AZ	9	492,739	6	298,734	77,088	106,008	10,909
Boston Logan, MA	10	486,785	16	243,235	212,002	30,779	769
Charlotte Douglas, NC	11	461,944	13	258,216	133,189	65,317	5,222
Long Beach, CA	12	436,114	106	15,318	3,328	415,324	2,144
Pittsburgh Greater Int'l, PA	13	430,195	10	285,045	119,875	19,968	5,307
St. Louis Int'l, MO	14	427,755	12	273,069	109,268	36,573	8,845
Detroit Metro Wayne, MI	15	427,383	9	285,373	87,995	51,897	2,118
San Francisco, CA	16	423,437	7	296,169	93,335	31,497	2,436
Minneapolis St Paul Int'l, MN	17	418,486	15	250,829	88,471	76,237	2,949
Oakland Int'l, CA	18	414,442	37	108,625	52,277	252,797	743
Newark, NJ	19	412,352	8	286,349	104,569	20,932	502
Las Vegas McCarran Int'l, NV	20	411,600	22	199,591	96,908	106,475	8,626
Seattle Boeing, WA	21	409,069	157	5,713	28,389	370,693	4,274
Honolulu, HI	22	403,708	21	202,559	58,782	113,623	28,744
Philadelphia Int'l, PA	23	383,262	18	210,707	120,673	45,704	6,178
Denver Centennial, CO	24	376,417	N/A	0	5,600	361,385	9,432
Pontiac, MI	25	357,569	226	197	12,273	344,426	673
Memphis Int'l, TN	26	346,180	25	168,617	112,227	59,741	5,595
Seattle-Tacoma, WA	27	345,995	23	196,141	140,744	8,800	310
John F. Kennedy Int'l, NY	28	341,200	19	210,593	114,693	15,489	425
La Guardia, NY	29	335,898	14	253,219	65,875	16,457	347
San Jose Int'l, CA	30	334,636	40	93,456	54,084	185,927	1,171
Houston Intercontinental, TX	31	326,886	17	224,810	58,359	42,027	1,690
Salt Lake City Int'l, UT	32	320,418	26	162,095	68,410	84,684	5,229
Fort Worth Meacham, TX	33	315,512	220	386	871	313,518	737
Washington National, DC	34	309,753	24	183,576	71,103	54,452	622
Nashville Metropolitan, TN	35	306,746	28	132,787	107,347	60,280	6,332
Cincinnati Greater, KY	36	305,544	27	153,113	139,449	11,764	1,218
Orlando Int'l, FL	37	305197	20	206,274	70,919	22,867	5137
Prescott, AZ	38	295,049	N/A	0	9691	284,859	499
Raleigh Durham, NC	39	292,942	35	119,533	95,126	69,357	8,926
Washington Dulles Int'l, VA	40	288244	38	104,704	121,262	54,269	8,009
Concord, CA	41	286,319	N/A	0	122	285,388	809
Daytona Beach, FL	42	282,896	116	13,149	7,680	261,076	991
Portland Int'l, OR	43	270,423	44	89,368	107,119	60,719	13,217
Baltimore Washinton Int'l. MD	44	264,165	31	122,524	89,526	48,261	3,854
Tamiami, FL	45	256,415	N/A	0	603	248,122	7,690
Tulsa Riverside, OK	46	256,070	N/A	0	14	256,051	5
Indianapolis, IN	47	252,580	32	121,320	79,184	50,437	1,639
Livermore , CA	48	252,370	N/A	0	283	250,952	1,135
La Verne Brackett, CA	49	247,973	N/A	0	1,469	246,225	279
Sanford, FL	50	244,572	253	44	92	244,113	323

NOTE: Total Operations rank was based on total air traffic activity at 400 FAA-Operated Towers. Air Carrier operations rank was based on air carrier activity at 298 FAA-Operated Towers. Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.17
TOP 50 FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF AIR CARRIER OPERATIONS AND BY AVIATION CATEGORY INCLUDING TOTAL OPERATIONS RANK
CALENDAR YEAR 1992

Tower	Rank	Air Carrier	Air Taxi	General Aviation	Military	Rank	Total Operations
Chicago O'Hare Int'l, IL	1	620,992	181,906	39,111	3,202	1	845,211
Dallas Ft. Worth Regional, TX	2	572,862	175,021	15,425	987	2	764,295
Atlanta Int'l, GA	3	447,095	149,005	21,152	4,388	4	621,640
Los Angeles Int'l, CA	4	409,122	191,315	66,179	13,873	3	680,489
Denver Stapleton Int'l, CO	5	323,007	155,084	32,953	1,453	7	512,497
Phoenix Sky Harbor Int'l, AZ	6	298,734	77,088	106,008	10,909	9	492,739
San Francisco, CA	7	296,169	93,335	31,497	2,436	16	423,437
Newark, NJ	8	286,349	104,569	20,932	502	19	412,352
Detroit Metro Wayne, MI	9	285,373	87,995	51,897	2,118	15	427,383
Pittsburgh Greater Int'l, PA	10	285,045	119,875	19,968	5,307	13	430,195
Miami Int'l, FL	11	281,535	124,020	80,934	10,333	8	496,822
St. Louis Int'l, MO	12	273,069	109,268	36,573	8,845	14	427,755
Charlotte Douglas, NC	13	258,216	133,189	65,317	5,222	11	461,944
La Guardia, NY	14	253,219	65,875	16,457	347	29	335,898
Minneapolis St Paul Int'l, MN	15	250,829	88,471	76,237	2,949	17	418,486
Boston Logan, MA	16	243,235	212,002	30,779	769	10	486,785
Houston Intercontinental, TX	17	224,810	58,359	42,027	1,690	31	326,886
Philadelphia Int'l, PA	18	210,707	120,673	45,704	6,178	23	383,262
John F. Kennedy Int'l, NY	19	210,593	114,693	15,489	425	28	341,200
Orlando Int'l, FL	20	206,274	70,919	22,867	5137	37	305,197
Honolulu, HI	21	202,559	58,782	113,623	28,744	22	403,708
Las Vegas McCarran Int'l, NV	22	199,591	96,908	106,475	8,626	20	411,600
Seattle-Tacoma, WA	23	196,141	140,744	8,800	310	27	345,995
Washington National, DC	24	183,576	71,103	54,452	622	34	309,753
Memphis Int'l, TN	25	168,617	112,227	59,741	5,595	26	346,180
Salt Lake City Int'l, UT	26	162,095	68,410	84,684	5,229	32	320,418
Cincinnati Greater, KY	27	153,113	139,449	11,764	1,218	36	305,544
Nashville Metropolitan, TN	28	132,787	107,347	60,280	6,332	35	306,746
San Diego Lindberg, CA	29	131,853	54,273	22,378	5,479	72	213,983
Cleveland Hopkins, OH	30	123,250	85,077	31,737	3,198	51	243,262
Baltimore, MD	31	122,524	89,526	48,261	3,854	44	264,165
Indianapolis Int'l, IN	32	121,320	79,184	50,437	1,639	47	252,580
Houston Hobby, TX	33	121,292	9,841	108,403	1,371	53	240,907
Tampa Int'l, FL	34	119,569	61,561	48,289	2,389	59	231,808
Raleigh Durham, NC	35	119,533	95,126	69,357	8,926	39	292,942
Kansas City Int'l, MO	36	109,798	50,313	15,600	1,805	117	177,516
Oakland International, CA	37	108,625	52,277	252,797	743	18	414,442
Washington Dulles Int'l, VA	38	104,704	121,262	54,269	8,009	40	288,244
Anchorage, AK	39	97,775	80,611	50,170	3,662	58	232,218
San Jose Int'l, CA	40	93,456	54,084	185,927	1,171	30	334,638
Ontario, CA	41	91,482	31,027	28,873	454	151	151,836
Dallas Love Field, TX	42	89,807	25,449	96,884	1,387	73	213,527
New Orleans Moisant, LA	43	89,628	24,096	22,483	1,367	178	137,574
Portland Int'l, OR	44	89,368	107,119	60,719	13,217	43	270,423
Fort Lauderdale, FL	45	82,920	46,052	78,613	1,480	77	209,065
Louisville Standiford, KY	46	80,864	28,947	37,224	6,265	149	153,300
Port Cloumbus, OH	47	79,850	54,826	92,089	3,890	60	230,655
San Antonio Int'l, TX	48	76,869	26,184	105,105	6,233	71	214,391
Milwaukee Mitchell, WI	49	74,941	55,860	65,237	6,992	81	203,030
San Juan, PR	50	73,023	88,628	34,452	5,874	83	201,977

NOTE: Total Operations rank was based on total air traffic activity at 400 FAA-Operated Towers. Air Carrier operations rank was based on air carrier activity at 298 FAA-Operated Towers. Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.18
TOTAL FAA AIR TRAFFIC ACTIVITY BY REGION AND STATE, AND BY FAA-OPERATED TOWERS, AIR ROUTE TRAFFIC CONTROL CENTERS, FLIGHT SERVICE STATIONS AND INTERNATIONAL FLIGHT SERVICE STATIONS
CALENDAR YEAR 1992

FAA Region and State	Airport Operations (Towers)	Aircraft Handled (Centers)	Aircraft Contacted (Flight Service Stations) *	Total Flight Services (Flight Service Station) *
TOTAL	**61,342,974**	**36,951,044**	**5,421,202**	**39,430,634**
Alaskan—Total	**1,091,135**	**510,870**	**900,652**	**2,031,290**
Central—Total	**2,336,899**	**1,767,232**	**281,865**	**2,766,399**
Iowa	415,646	—	46,349	508,187
Kansas	474,480	—	55,063	534,801
Missouri	1,168,348	1,767,232	128,082	1,367,060
Nebraska	278,425	—	52,371	356,351
Eastern—Total	**8,060,137**	**4,204,964**	**421,437**	**4,865,353**
Delaware	170,200	—	—	—
District of Columbia	309,753	2,221,164	79,992	892,534
Maryland	472,197	—	56,137	104,503
New Jersey	1,310,774	—	51,391	654,269
New York	2,429,282	1,983,800	64,328	1,034,082
Pennsylvania	1,882,598	—	89,737	1,637,085
Virginia	1,116,074	—	11,136	158,092
West Virginia	369,259	—	68,716	384,788
Great Lakes—Total	**9,248,506**	**8,724,492**	**606,999**	**6,252,487**
Illinois	2,542,409	2,580,490	62,606	933,100
Indiana	817,722	1,914,529	67,569	809,657
Michigan	2,057,710	—	63,224	1,018,702
Minnesota	1,072,604	1,806,245	113,252	793,786
North Dakota	425,463	—	42,868	430,364
Ohio	1,301,344	2,423,228	70,374	1,186,336
South Dakota	164,528	—	101,887	385,993
Wisconsin	866,728	—	85,219	694,549
New England—Total	**2,982,365**	**1,606,136**	**127,564**	**1,713,880**
Connecticut	748,726	—	60,982	906,004
Maine	232,557	—	30,723	381,781
Massachusetts	1,570,463	1,606,136	—	—
New Hampshire	170,566	—	—	—
Rhode Island	137,780	—	—	—
Vermont	122,273	—	35,859	426,095
Northwest Mountain—Total	**5,515,903**	**4,084,639**	**728,826**	**3,522,426**
Colorado	1,491,319	1,400,372	128,546	778,226
Idaho	402,737	—	43,068	226,938
Montana	305,163	—	134,726	390,994
Oregon	965,820	—	107,002	529,820
Utah	418,891	1,379,276	65,182	313,370
Washington	1,822,107	1,304,991	178,838	1,020,320
Wyoming	109,866	—	71,464	262,758
Southern—Total	**11,405,356**	**7,565,716**	**1,082,110**	**9,041,328**
Alabama	595,635	—	100,532	780,820
Florida	5,360,751	3,456,418	397,860	3,200,958
Georgia	1,329,434	2,231,434	92,083	1,199,431
Kentucky	720,095	—	89,592	519,690
Mississippi	292,095	—	39,018	377,192
North Carolina	1,224,799	—	136,244	1,105,804
Puerto Rico	318,578	—	66,504	245,190
South Carolina	421,255	—	49,270	632,954
Tennessee	964,357	1,877,864	111,007	979,289
Virgin Islands	178,357	—	—	—
Southwest—Total	**6,789,481**	**5,023,926**	**566,007**	**4,667,111**
Arkansas	346,428	—	60,080	482,444
Louisiana	973,477	—	32,148	492,944
New Mexico	407,757	1,363,834	137,696	551,738
Oklahoma	782,096	—	78,220	639,346
Texas	4,279,723	3,660,092	257,863	2,500,639
Western-Pacific—Total	**13,913,190**	**3,463,069**	**705,742**	**4,570,360**
American Samoa	11,280	—	—	—
Arizona	2,001,706	—	121,281	654,779
California	10,287,071	3,363,422	494,752	3,309,020
Guam	—	99,647	—	—
Hawaii	876,974	—	36,905	213,683
Nevada	718,308	—	52,804	392,878
Wake Island	17,851	—	—	—

* Includes domestic and international Flight Service Stations

III. AIRPORTS

Information about U.S. civil and joint-use landing facilities (including airports, heliports, stolports, and seaplane bases) was furnished by the FAA Office of Airport Safety and Standards. This information was obtained through physical inspection and mail solicitations, and was reported on the Airport Master Record (Form FAA 5010–1) and FAA Landing Facilities Information Request on Airports, Heliports, Stolports, and Seaplane Bases (Forms 5010–2 and 5010–5).

TABLE 3.1
U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES, ON RECORD: 1983–1992

Year	All Facilities [1]			Airports Only			
	Total	With Runway Lights	With Paved Runways	Total	With Runway Lights	With Paved Runway	Airports of Entry [2]
1983	16,029	4,878	6,441	12,653	4,513	4,431	59
1984	16,079	4,889	6,531	12,648	4,536	4,450	59
1985	16,318	4,941	6,721	12,744	4,582	4,486	57
1986	16,582	4,954	6,948	12,785	4,601	4,499	76
1987	17,015	4,922	7,232	12,907	4,610	4,526	80
1988	17,327	4,890	7,429	12,950	4,630	4,554	80
1989	17,446	4,881	7,612	12,946	4,657	4,600	84
1990	17,490	4,822	7,694	12,920	4,652	4,611	81
1991	17,581	4,811	7,822	12,904	4,665	4,634	81
1992	17,846	4,831	7,936	13,016	4,695	4,654	81

[1] All facilities include airports, heliports, stolports and seaplane bases.
[2] Excludes landing rights airports.

TABLE 3.2
U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES, AND REPORTED ABANDONMENTS ON RECORD, BY FAA REGION AND STATE
DECEMBER 31, 1992

FAA Region and State	Total Aircraft Facilities	Airports	Heliports	Stolports	Seaplane Bases	Reported Abandonments During Year
Total	**17,846**	**13,016**	**4,323**	**74**	**433**	**225**
United States—Total[1]	**17,769**	**12,968**	**4,298**	**74**	**429**	**224**
Alaska—Total	**559**	**436**	**20**	**0**	**103**	**0**
Central—Total	**1,443**	**1,215**	**219**	**3**	**6**	**41**
Iowa	293	225	67	1	0	5
Kansas	382	353	28	1	0	13
Missouri	473	364	103	1	5	7
Nebraska	295	273	21	0	1	16
Eastern—Total	**2,296**	**1,419**	**810**	**8**	**59**	**30**
Delaware	36	23	12	0	1	0
District	16	2	14	0	0	0
Maryland	187	138	46	1	2	3
New Jersey	334	112	212	0	10	4
New York	520	368	127	0	25	4
Pennsylvania	757	473	273	3	8	13
Virginia	345	242	97	3	3	6
West Virginia	101	61	29	1	10	0
Great Lakes—Total	**4,205**	**3,392**	**704**	**9**	**100**	**78**
Illinois	917	676	234	0	7	19
Indiana	576	470	100	1	5	13
Michigan	435	367	63	2	3	6
Minnesota	483	376	35	1	71	4
No. Dakota	450	442	7	0	1	15
Ohio	716	521	191	4	0	8
So. Dakota	157	147	9	1	0	4
Wisconsin	471	393	65	0	13	9
New England—Total	**669**	**341**	**257**	**5**	**66**	**17**
Connecticut	131	55	69	1	6	4
Maine	156	104	15	0	37	9
Massachusetts	205	77	111	1	16	2
New Hampshire	84	45	34	1	4	1
Rhode Island	22	10	11	0	1	1
Vermont	71	50	17	2	2	0
Northwest Mountain—Total	**1,868**	**1,390**	**447**	**9**	**22**	**0**
Colorado	395	216	175	4	0	0
Idaho	212	182	26	0	4	0
Montana	234	213	19	1	1	0
Oregon	387	299	84	2	2	0
Utah	118	85	33	0	0	0
Washington	423	310	96	2	15	0
Wyoming	99	85	14	0	0	0
Southern—Total	**2,459**	**1,803**	**591**	**27**	**38**	**16**
Alabama	208	162	44	0	2	0
Florida	732	468	227	9	28	12
Georgia	382	287	91	4	0	1
Kentucky	153	119	33	1	0	0
Mississippi	216	177	39	0	0	0
No. Carolina	344	284	55	4	1	3
Puerto Rico	33	17	15	0	1	0
So. Carolina	153	132	21	0	0	0
Tennessee	229	155	62	9	3	0
Virgin Islands	9	2	4	0	3	0
Southwest—Total	**2,953**	**2,135**	**783**	**8**	**27**	**17**
Arkansas	243	173	70	0	0	0
Louisiana	426	196	205	0	25	5
New Mexico	170	150	19	0	1	0
Oklahoma	411	321	89	0	1	4
Texas	1,703	1,295	400	8	0	8
Western-Pacific—Total	**1,394**	**885**	**492**	**5**	**12**	**26**
Arizona	271	183	87	1	0	5
California	920	543	362	3	12	16
Hawaii	47	32	15	0	0	2
Nevada	121	98	22	1	0	2
South Pacific[2]	35	29	6	0	0	1

[1] Excludes Puerto, Virgin Islands, and South Pacific
[2] American Somoa, Guam, and Trust Territories.

TABLE 3.3
U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES, ON RECORD, BY TYPE OF OWNERSHIP DECEMBER 31, 1992

FAA Region and State	Total Facilities	By Ownership		Paved Facilities		Unpaved Facilities	
		Private	Public	Lighted	Not Lighted	Lighted	Not Lighted
Total	**17,846**	**12,243**	**4,572**	**3,955**	**3,981**	**876**	**9,034**
U.S. Total[1]	**17,769**	**12,148**	**4,464**	**3,931**	**3,956**	**876**	**9,006**
Alaska—Total	**559**	**171**	**388**	**44**	**17**	**103**	**395**
Central—Total	**1,443**	**949**	**494**	**403**	**222**	**106**	**712**
Iowa	293	161	132	100	62	41	90
Kansas	382	250	132	104	32	29	217
Missouri	473	336	137	121	100	22	230
Nebraska	295	202	93	78	28	14	175
Eastern—Total	**2,296**	**1,955**	**341**	**396**	**587**	**106**	
Delaware	36	32	4	7	7	5	17
District	16	9	7	4	11	0	1
Maryland	187	167	20	37	36	12	102
New Jersey	334	291	43	39	106	11	178
New York	520	432	88	95	115	40	270
Pennsylvania	757	682	75	109	202	30	416
Virginia	345	271	74	77	78	9	181
West Virginia	101	71	30	30	32	1	38
Great Lakes—Total	**4,205**	**3,292**	**913**	**808**	**555**	**297**	
Illinois	917	798	119	111	168	57	581
Indiana	576	487	89	89	78	31	380
Michigan	435	299	136	129	52	48	206
Minnesota	483	334	149	105	35	36	307
No. Dakota	450	353	97	67	12	29	342
Ohio	716	580	136	142	138	45	391
So. Dakota	157	79	78	54	9	21	73
Wisconsin	471	362	109	111	65	30	265
New England—Total	**669**	**525**	**144**	**129**	**198**	**11**	
Connecticut	131	115	16	25	56	2	48
Maine	156	109	47	30	19	3	104
Massachusetts	205	170	35	40	76	3	86
New Hampshire	84	67	17	17	31	2	34
Rhode Island	22	13	9	7	9	0	6
Vermont	71	51	20	10	7	1	53
Northwest Mountain—Total	**1,868**	**1,186**	**683**	**434**	**405**	**74**	
Colorado	395	303	92	68	103	14	210
Idaho	212	82	130	45	32	2	133
Montana	234	109	125	73	26	16	119
Oregon	387	285	102	62	95	14	216
Utah	118	58	60	44	37	1	36
Washington	423	297	126	108	96	24	195
Wyoming	99	51	48	34	16	3	46
Southern—Total	**2,459**	**1,631**	**828**	**684**	**571**	**92**	
Alabama	208	110	98	90	48	8	62
Florida	732	570	162	119	193	27	393
Georgia	382	248	134	105	85	11	181
Kentucky	153	82	71	55	43	4	51
Mississippi	216	127	89	73	48	7	88
No. Carolina	344	250	94	92	59	21	172
So. Carolina	153	85	68	57	21	8	67
Tennessee	229	140	89	80	56	6	87
Puerto Rico	33	16	17	11	17	0	5
Virgin Islands	9	3	6	2	1	0	6
Southwest—Total	**2,953**	**2,138**	**815**	**696**	**854**	**67**	
Arkansas	243	131	112	82	81	5	75
Louisiana	426	321	105	74	173	2	177
New Mexico	170	94	76	46	33	2	89
Oklahoma	411	251	160	117	98	15	181
Texas	1,703	1,341	362	377	469	43	814
Western-Pacific—Total	**1,394**	**884**	**510**	**359**	**572**	**18**	
Arizona	271	182	89	69	84	3	115
California	920	607	313	235	428	11	246
Hawaii	47	30	17	13	26	1	7
Nevada	121	57	64	31	27	3	60
South Pacific[2]	35	8	27	11	7	0	17

[1] Excludes Puerto, Virgin Islands, and South Pacific
[2] American Somoa, Guam, and Trust Territories.

TABLE 3.4
U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES ON RECORD, BY LENGTH OF LONGEST RUNWAY [1], BY FAA REGION AND STATE
DECEMBER 31, 1992

FAA State and Region	Total	Under 3000	3000–3999	4000–4999	5000–5999	6000–6999	7000–7999	8000–8999	9000–9999	10,000–Over
Total	**17,846**	**12,027**	**2,658**	**1,276**	**910**	**358**	**186**	**119**	**69**	**243**
U.S. Total [1]	**17,769**	**11,965**	**2,651**	**1,272**	**906**	**350**	**180**	**118**	**67**	**240**
Alaska—Total	**559**	**306**	**75**	**43**	**46**	**21**	**10**	**6**	**6**	**46**
Central—Total	**1,443**	**1,008**	**242**	**100**	**41**	**18**	**12**	**7**	**3**	**12**
Iowa	293	202	37	37	8	5	0	3	1	0
Kansas	382	264	66	24	15	3	7	0	0	3
Missouri	473	346	81	17	11	6	3	1	1	7
Nebraska	295	196	58	22	7	4	2	3	1	2
Eastern—Total	**2,296**	**1,860**	**189**	**84**	**78**	**28**	**14**	**7**	**11**	**25**
Delaware	36	26	5	2	2	0	1	0	0	0
District	16	14	0	0	0	1	0	0	0	1
Maryland	187	152	21	5	6	1	0	1	1	0
New Jersey	334	292	20	5	10	2	1	1	1	2
New York	520	390	51	21	19	9	4	2	4	20
Pennsylvania	757	660	43	23	13	6	6	1	3	2
Virginia	345	264	36	21	15	5	0	2	2	0
West Virginia	101	62	13	7	13	4	2	0	0	0
Great Lakes—Total	**4,205**	**3,137**	**558**	**220**	**121**	**59**	**29**	**25**	**8**	**48**
Illinois	917	795	58	26	16	10	3	6	0	3
Indiana	576	466	53	26	16	5	2	1	1	6
Michigan	435	291	73	27	22	10	6	1	1	4
Minnesota	483	274	86	39	30	16	9	6	1	22
No. Dakota	450	340	78	20	5	3	2	1	1	0
Ohio	716	557	87	41	16	5	2	2	1	5
So. Dakota	157	76	50	19	4	5	1	2	0	0
Wisconsin	471	338	73	22	12	5	4	6	3	8
New England—Total	**669**	**497**	**53**	**34**	**41**	**11**	**10**	**3**	**2**	**18**
Connecticut	131	112	5	6	5	0	1	0	1	1
Maine	156	84	18	15	14	5	4	2	0	14
Massachusetts	205	163	16	5	13	3	1	1	1	2
New Hampshire	84	63	6	5	5	3	1	0	0	1
Rhode Island	22	17	0	2	1	0	2	0	0	0
Vermont	71	58	8	1	3	0	1	0	0	0
Northwest Mountain—Total	**1,868**	**1,129**	**303**	**178**	**125**	**49**	**26**	**15**	**16**	**27**
Colorado	395	248	52	36	26	11	6	6	4	6
Idaho	212	107	46	37	9	4	2	1	3	3
Montana	234	97	71	38	13	4	1	2	4	4
Oregon	387	291	46	17	23	6	1	1	0	2
Utah	118	38	20	22	20	9	5	2	1	1
Washington	423	315	52	13	20	7	4	0	3	9
Wyoming	99	33	16	15	14	8	7	3	1	2
Southern—Total	**2,459**	**1,475**	**465**	**226**	**153**	**58**	**25**	**23**	**9**	**25**
Alabama	208	108	42	26	14	9	1	3	2	3
Florida	732	465	117	68	32	16	11	9	2	12
Georgia	382	235	72	29	34	8	0	2	1	1
Kentucky	153	97	21	20	8	4	1	0	0	2
Mississippi	216	105	74	12	9	10	1	4	1	0
No. Carolina	344	219	62	32	18	4	5	1	0	3
Puerto Rico	33	22	4	2	1	2	0	0	0	2
So. Carolina	153	79	39	15	15	2	1	2	0	0
Tennessee	229	140	34	22	22	3	2	2	3	1
Virgin Islands	9	5	0	0	0	0	3	0	0	1
Southwest—Total	**2,953**	**1,773**	**563**	**262**	**217**	**60**	**32**	**19**	**6**	**21**
Arkansas	243	142	45	27	19	8	1	1	0	0
Louisiana	426	299	58	17	36	4	3	2	0	7
New Mexico	170	46	25	29	38	12	11	6	0	3
Oklahoma	411	269	77	29	21	7	3	1	1	3
Texas	1703	1,017	358	160	103	29	14	9	5	8
Western-Pacific—Total	**1,394**	**842**	**210**	**129**	**88**	**54**	**28**	**14**	**8**	**21**
Arizona	271	136	38	43	23	16	8	5	0	2
California	920	621	148	59	38	20	9	6	4	15
Hawaii	47	33	5	2	2	2	1	0	1	1
Nevada	121	37	16	23	22	10	7	2	1	3
South Pacific [2]	35	15	3	2	3	6	3	1	2	0

[1] Excludes Puerto, Virgin Islands, and South Pacific
[2] American Somoa, Guam, and Trust Territories.

TABLE 3.5
U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES ON RECORD, BY FAA REGION AND STATE AND OTHER AREAS DECEMBER 31, 1983–1992

FAA Region and State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	**17,846**	**17,581**	**17,490**	**17,446**	**17,327**	**17,015**	**16,582**	**16,318**	**16,079**	**16,029**
U.S. Total[1]	**17,769**	**17,509**	**17,419**	**17,377**	**17,259**	**16,949**	**16,516**	**16,252**	**16,013**	**15,966**
Alaska—Total	**559**	**545**	**602**	**593**	**603**	**583**	**614**	**610**	**609**	**615**
Central—Total	**1,443**	**1,453**	**1,401**	**1,406**	**1,417**	**1,437**	**1,421**	**1,437**	**1,430**	**1,425**
Iowa	293	290	273	273	274	277	279	278	282	280
Kansas	382	394	386	385	390	389	382	385	384	380
Missouri	473	462	440	431	431	440	429	437	423	419
Nebraska	295	307	302	317	322	331	331	337	341	346
Eastern—Total	**2,296**	**2,246**	**2,192**	**2,208**	**2,192**	**2,175**	**2,134**	**2,076**	**2,048**	**2,051**
Delaware	36	34	33	34	34	35	37	36	36	37
District	16	16	16	17	16	15	15	15	15	16
Maryland	187	168	158	162	157	154	155	151	149	147
New Jersey	334	329	321	322	317	317	286	295	294	291
New York	520	512	497	493	506	507	495	485	480	476
Pennsylvania	757	752	742	765	756	744	755	719	708	720
Virginia	345	341	331	322	313	308	299	282	274	270
West. Virginia	101	94	94	93	93	95	92	93	92	94
Great Lakes—Total	**4,205**	**4,219**	**4,222**	**4,235**	**4,190**	**4,135**	**4,071**	**4,060**	**4,027**	**4,031**
Illinois	917	924	928	938	924	913	894	886	901	909
Indiana	576	576	566	554	545	530	518	523	495	498
Michigan	435	432	431	434	434	431	419	422	427	422
Minnesota	483	477	472	475	475	477	472	479	480	492
No. Dakota	450	464	475	480	486	487	499	484	457	451
Ohio	716	714	715	720	714	716	697	690	689	678
S. Dakota	157	160	159	158	155	158	161	164	165	165
Wisconsin	471	472	476	476	457	423	411	410	413	416
New England—Total	**669**	**662**	**648**	**612**	**595**	**568**	**536**	**515**	**509**	**513**
Connecticut	131	134	132	130	128	120	112	108	104	105
Maine	156	159	157	148	146	144	144	144	143	146
Massachutts	205	197	195	181	170	158	141	131	130	130
New Hampshire	84	79	74	69	67	62	58	53	54	54
Rhode Island	22	23	24	23	23	22	20	18	18	18
Vermont	71	70	66	61	61	62	61	61	60	60
Northwest Mountain—Total	**1,868**	**1,808**	**1,804**	**1,805**	**1,812**	**1,737**	**1,685**	**1,662**	**1,628**	**1,636**
Colorado	395	373	384	385	396	333	323	321	315	321
Idaho	212	211	211	211	209	207	205	202	198	196
Montana	234	227	220	214	212	210	203	200	194	197
Oregon	387	378	370	372	367	366	351	342	336	341
Utah	118	112	112	111	113	109	105	101	97	95
Washington	423	411	410	412	413	408	396	395	385	382
Wyoming	99	96	97	100	102	104	102	101	101	104
Southern—Total	**2,459**	**2,364**	**2,305**	**2,285**	**2,293**	**2,165**	**2,099**	**2,002**	**1,961**	**1,947**
Alabama	208	203	196	195	201	193	183	174	173	169
Florida	732	698	662	645	669	607	594	557	542	541
Georgia	382	375	368	363	352	334	325	304	301	302
Kentucky	153	144	143	148	148	139	139	134	129	127
Mississippi	216	207	207	207	205	194	190	188	180	181
No. Carolina	344	336	331	332	322	316	307	292	288	284
Puerto Rico	153	29	29	29	28	27	30	31	31	31
S. Carolina	229	146	150	150	152	146	137	139	139	137
Tennessee	33	218	211	208	208	201	186	176	171	169
Virgin Islands	9	8	8	8	8	8	8	7	7	6
Southwest—Total	**2,953**	**2,884**	**2,923**	**2,910**	**2,833**	**2,818**	**2,661**	**2,624**	**2,541**	**2,506**
Arkansas	243	236	230	218	195	173	167	163	156	160
Lousiana	426	413	426	419	385	381	357	353	317	311
New Mexico	170	170	164	170	167	174	168	169	167	160
Oklahoma	411	403	411	406	399	403	341	336	335	332
Texas	1,703	1,662	1,692	1697	1687	1687	1628	1603	1,566	1,543
Western-Pacific—Total	**1,394**	**1,400**	**1,393**	**1,392**	**1,392**	**1,387**	**1,361**	**1,332**	**1,328**	**1,305**
Arizona	271	273	272	270	272	265	262	246	244	240
California	920	922	918	910	907	909	895	887	881	862
Hawaii	47	48	50	53	54	54	51	50	51	51
Nevada	121	122	119	127	127	128	125	121	124	126
South Pacific[2]	35	35	34	32	32	31	28	28	28	26

[1] Excludes Puerto, Virgin Islands, and South Pacific
[2] American Somoa, Guam, and Trust Territories.

TABLE 3.6
AIRPORT IMPROVEMENT PROGRAM: FISCAL YEAR 1992
(Excludes Amendment to Grants) (Thousands of Dollars)

FAA Region and State	Primary		Commercial		Reliever		General Aviation		System Planning		Check Totals	
	Total Federal Funds	Total Projects	Total Federal Funds	Total Projects	Total Federal Funds	Total Projects	Total Federal Funds	Total Projects	Total Federal Funds	Total Projects	Total Federal Funds	Total Projects
Total[2]	**1,219,664.2**	**664**	**56,381.2**	**75**	**165,035.1**	**209**	**252,063.5**	**489**	**11,329.1**	**67**	**1,704,473.1**	**1504**
US Total[1]	**1,191,782.4**	**651**	**52,866.2**	**72**	**165,035.1**	**209**	**249,866.0**	**485**	**11,329.1**	**67**	**1,670,848.8**	**1484**
Alaska—Total	**22,203.7**	**15**	**13,288.7**	**6**	**0.0**	**0**	**27,014.1**	**20**	**238.2**	**1**	**62,744.7**	**42**
Central—Total	**55,417.0**	**33**	**4,394.5**	**6**	**6,880.9**	**9**	**16,930.5**	**28**	**894.9**	**6**	**84,517.8**	**82**
Iowa	11,092.0	11	1,688.8	3	2,728.9	1	6,060.5	10	125.0	1	21,695.2	26
Kansas	4,643.1	2	2,705.7	3	2,032.9	7	6,147.5	9	155.6	2	15,684.8	23
Missouri	28,831.5	11	0.0	0	0.0	0	0.0	0	614.3	3	29,445.8	14
Nebraska	10,850.4	9	0.0	0	2,119.1	1	4,722.5	9	0.0	0	17,692.0	19
Eastern—Total	**188,161.7**	**112**	**4,516.4**	**9**	**24,335.2**	**48**	**35,000.5**	**75**	**2,210.1**	**16**	**254,223.9**	**260**
Delaware	0.0	0	0.0	0	72.9	1	836.1	2	58.5	1	967.5	4
District	0.0	0	0.0	0	0.0	0	0.0	0	180.5	1	180.5	1
Maryland	7,067.4	6	0.0	0	2,699.5	4	1,552.7	5	0.0	0	11,319.6	15
New Jersey	14,619.5	7	651.4	1	5,697.4	11	3,344.5	5	90.0	1	24,402.8	25
New York	77,625.3	47	3,449.4	7	5,526.3	17	12,188.6	26	450.0	8	99,239.6	105
Pennsylvania	53,304.3	24	0.0	0	4,658.5	8	8,114.9	18	595.0	3	66,672.7	53
Virginia	30,781.9	20	415.6	1	5,680.6	7	7,005.6	12	836.1	2	44,719.8	42
W. Virginia	4,763.3	8	0.0	0	0.0	0	1,958.1	7	0.0	0	6,721.4	15
Great Lakes—Total	**186,722.4**	**109**	**8,082.7**	**13**	**27,510.1**	**24**	**34,447.1**	**65**	**1,581.5**	**7**	**258,343.8**	**218**
Illinois	60,274.2	22	0.0	0	14,000.0	3	0.0	0	195.4	1	74,469.6	26
Indiana	14,305.6	17	1,401.6	1	2,290.5	4	6,119.5	10	241.7	1	24,358.9	33
Michigan	34,255.4	24	3,022.8	3	2,588.0	4	7,224.2	18	150.0	1	47,240.4	50
Minnesota	20,276.6	11	852.3	2	431.5	2	4,605.0	2	496.2	2	26,661.6	19
N. Dakota	8,032.5	6	719.5	2	0.0	0	2,494.8	7	0.0	0	11,246.8	15
Ohio	33,047.3	14	0.0	0	3,068.3	6	6,316.6	14	194.4	1	42,626.6	35
S. Dakota	3,041.6	4	1,865.0	4	0.0	0	3,349.0	9	0.0	0	8,255.6	17
Wisconsin	13,489.2	11	221.5	1	5,131.8	5	4,338.0	5	303.8	1	23,484.3	23
New England—Total	**44,110.5**	**32**	**2,822.0**	**6**	**5,531.3**	**11**	**9,070.7**	**19**	**1,133.6**	**4**	**62,668.1**	**72**
Connecticut	9,510.3	4	0.0	0	296.7	2	2,956.3	2	0.0	0	12,763.3	8
Maine	2,353.8	5	2,428.6	4	922.7	3	2,072.7	4	0.0	0	7,777.8	16
Massachusetts	13,981.6	11	141.2	1	861.8	3	2,686.8	7	880.4	3	18,551.8	25
New Hampshire	11,088.8	5	252.2	1	433.8	2	1,080.8	5	0.0	0	12,855.6	13
Rhode Island	6,123.0	4	0.0	0	3,016.3	1	0.0	0	253.2	1	9,392.5	6
Vermont	1,053.0	3	0.0	0	0.0	0	274.1	1	0.0	0	1,327.1	4
Northwest Mountain—Total	**157,072.9**	**68**	**6,296.1**	**15**	**14,742.9**	**20**	**27,912.5**	**71**	**1,383.4**	**13**	**207,407.8**	**207**
Colorado	68,652.6	19	3,839.4	8	7,019.8	7	4,765.5	11	260.5	4	84,537.8	49
Idaho	9,464.0	9	0.0	0	0.0	0	2,976.3	7	136.8	1	12,577.1	17
Montana	5,895.4	10	0.0	0	0.0	0	4,872.3	9	0.0	0	10,767.7	19
Oregon	9,219.3	14	98.8	1	3,583.1	3	4,152.2	11	135.0	1	17,188.4	30
Utah	10,359.1	6	776.4	3	600.0	2	3,440.1	9	127.4	2	15,303.0	22
Washington	45,543.4	14	511.5	2	3,540.0	8	4,474.6	13	613.8	4	54,683.3	41
Wyoming	7,939.1	16	1,070.0	1	0.0	0	3,231.5	11	109.9	1	12,350.5	29
Southern—Total	**254,182.8**	**115**	**7,173.9**	**5**	**33,697.5**	**37**	**33,913.0**	**91**	**1,707.8**	**8**	**330,675.0**	**256**
Alabama	13,440.1	10	2,525.8	2	393.1	1	4,010.4	12	0.0	0	20,369.4	25
Florida	70,882.3	32	0.0	0	20,583.4	22	9,021.7	28	325.2	2	100,812.6	84
Georgia	29,738.9	8	0.0	0	6,312.6	8	5,124.3	14	980.4	2	42,156.2	32
Kentucky	34,139.3	10	0.0	0	2,777.5	3	6,155.2	11	86.0	1	43,158.0	25
Mississippi	7,758.9	8	0.0	0	0.0	0	2,633.2	10	241.2	1	10,633.3	19
N. Carolina	24,680.5	11	0.0	0	0.0	0	0.0	0	0.0	0	24,680.5	11
Puerto Rico	7,944.9	5	2,911.0	1	0.0	0	252.7	1	0.0	0	11,108.6	7
S. Carolina	11,893.5	12	0.0	0	3,630.9	3	2,842.2	9	0.0	0	18,366.6	24
Tennessee	44,400.9	16	1,737.1	2	0.0	0	3,873.3	6	75.0	2	50,086.3	26
Virgin Islands	9,303.5	3	0.0	0	0.0	0	0.0	0	0.0	0	9,303.5	3
Southwest—Total	**162,050.7**	**95**	**3,882.8**	**8**	**27,879.0**	**42**	**32,994.0**	**65**	**1,179.6**	**7**	**227,986.1**	**217**
Arkansas	9,495.9	8	708.2	2	1,681.7	4	3,585.8	11	115.2	1	15,586.8	26
Lousiana	34,797.6	19	0.0	0	3,957.1	9	2,764.4	10	200.0	1	41,719.1	39
New Mexico	9,765.3	5	3,174.6	6	819.0	1	4,771.7	9	255.8	2	18,786.4	23
Oklahoma	17,442.7	9	0.0	0	4,133.2	8	6,159.3	11	283.8	2	28,019.0	30
Texas	90,549.2	54	0.0	0	17,288.0	20	15,712.8	24	324.8	1	123,874.8	99
Western-Pacific—Total	**149,742.5**	**65**	**5,924.1**	**7**	**24,458.2**	**18**	**34,781.1**	**55**	**1,000.0**	**5**	**215,905.9**	**150**
Arizona	27,112.1	8	4,920.1	3	5,371.6	2	5,494.0	10	664.5	2	43,562.3	25
California	69,321.0	39	0.0	0	16,519.4	14	21,756.5	36	204.6	2	107,801.5	91
Hawaii	20,736.6	7	400.0	2	0.0	0	0.0	0	0.0	0	21,136.6	9
Nevada	21,909.4	6	0.0	0	2,567.2	2	5,585.8	6	130.9	1	30,193.3	15
South Pacific[2]	10,663.4	5	604.0	2	0.0	0	1,944.8	3	0.0	0	13,212.2	10

[1] Excludes Puerto Rico, Virgin Islands, amd South Pacific
[2] American Samoa, Guam, Nortt Mariana, and Trust Territories
Note: Excludes State Block Grants: Illinois 29,235.9 14,003.2 N.Carolina 17,278.1 Total 60,517.2

IV. AIRPORT ACTIVITY OF CERTIFICATED ROUTE AIR CARRIERS

This chapter covers only the large scheduled certificated air carriers;* and thus excludes the charter only, small certificated, commuter, intrastate and foreign-flag air carriers. Note that this chapter covers only a subset of the carriers covered by Chapter VI—U.S. Certificated Air Carriers—Operating Data.

The data presented in this chapter were obtained from information reported quarterly to the Department of Transportation's Research and Special Programs Administration (RSPA) by the large scheduled certificated air carriers on Schedules T-100 and T–3, RSPA Form 41, Uniform System of Accounts and Reports for Large Certificated Air Carriers. These statistics summarize , scheduled and non scheduled service revenue; passenger enplanements; aircraft departures; and tons of freight, express, and mail enplaned at certificated points in the 50 States, the District of Columbia, and other U.S. areas served by the carriers.

The activity information in Tables 4.5-4.9 is presented by "hubs". Air traffic hubs are geographical areas, and are based on the percentage of total passengers enplaned in the area. A hub may have more than one airport in it. This definition of hub should not be confused with the definition being used by the airlines in describing their "hub and spoke" structures. The hubs constitute a primary focal point for the transportation research programs of the FAA, and the analyses of individual cities within an area are treated in relationship to the entire area.

Individual communities fall into four hub classifications as determined by each community's percentage of the total enplaned revenue passengers in all services and all operations of U.S. certificated route air carriers within the 50 States, the District of Columbia, and other U.S. areas. Classifications in this issues are based on 447,625,9978 total enplaned revenue passengers.

The percentage and number of enplaned passengers in the hub classifications for 12 months ending December 31, 1992 are:

Hub Classification	Percentage of Total Enplaned Passengers	Number of Enplaned Passengers
Large (L)	1.00 or more	4,476,260 or more
Medium (M)	0.25 to 0.99	1,119,064 to 4,476,260
Small (S)	0.05 to 0.24	223,812 to 1,119,064
Nonhub (N)	less than 0.05	less than 223,812

During 1992 there were 126 air traffic hubs representing 25% of the 496 air traffic hubs and nonhubs in the 50 states, the District of Columbia, and other U. S. areas receiving air carrier service during the year. The dominance of the hubs in air traffic patterns is brought out by the fact that 98% of passenger enplanements were recorded at these 126 hubs. The table below shows the number of hubs/nonhubs and the number of airports in those hubs. It also shows the number and percentage of passenger enplanements at the hubs/nonhubs.

Hub Classification	Number of Hubs/ Nonhubs	Number of Airports	Passengers Enplaned	Passengers Percent
Large	2[illegible]	49	319,582,090	71.39
Medium	31	39	80,800,955	18.05
Small	69	73	36,879,632	8.24
Nonhub	370	382	10,363,311	2.32
TOTAL	496	543	447,625,998	100.00

*Large Certificated Air Carrier—carrier holding a certificate issued under Section 401 of the Federal Aviation Act of 1958 and operating aircraft designed to have a maximum passenger seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds or conducting international operations.

Air Traffic Hubs
December 31, 1992

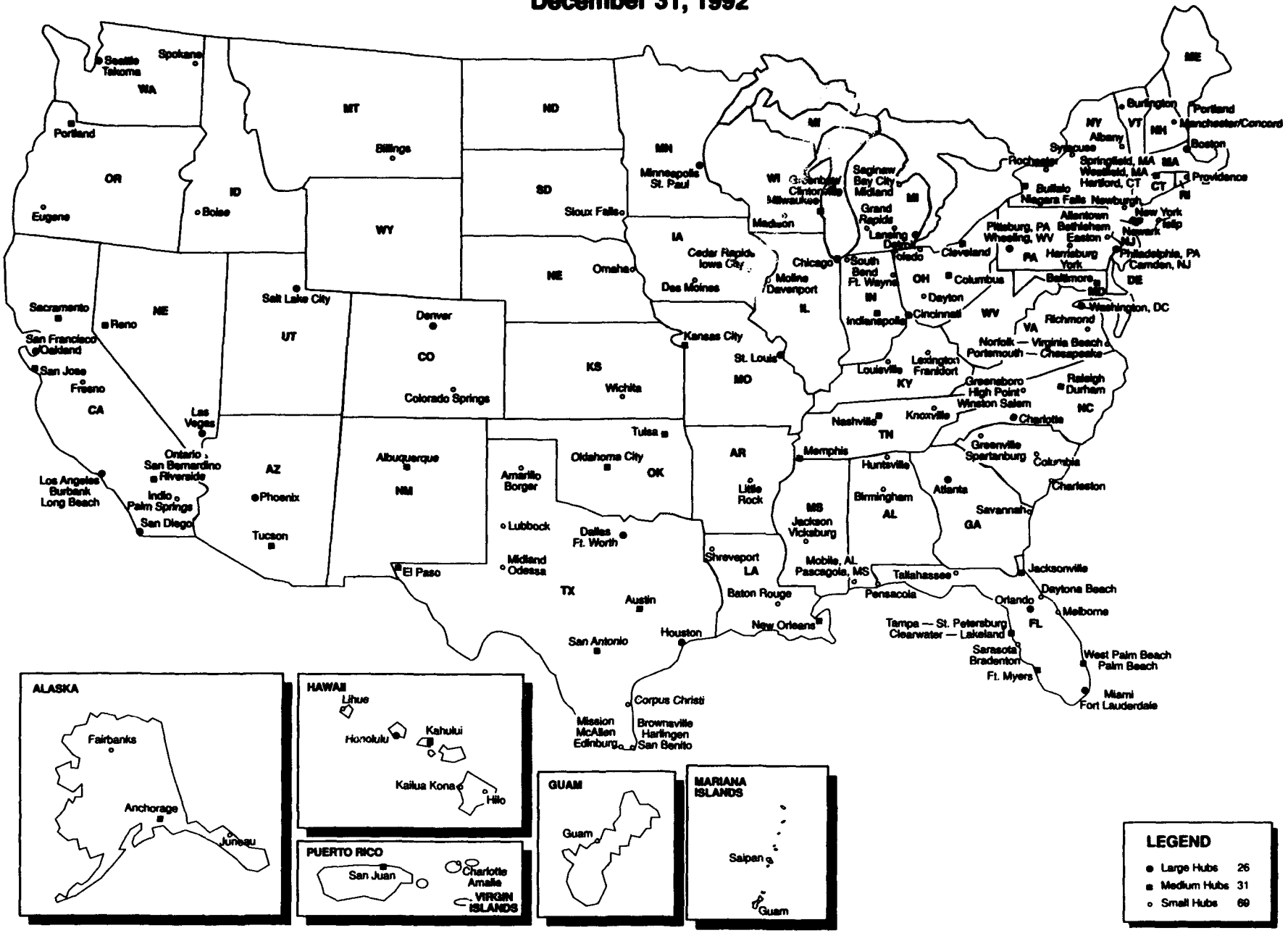


TABLE 4.1
LARGE SCHEDULED CERTIFICATED AIR CARRIERS
AS OF DECEMBER 31, 1992

Aerial Transit	Kiwi
Air Wisconsin	Markair
Alaska Airlines	MGM Grand
Aloha Airlines	Midwest Express Airlines
America West Airlines	Northern Air Cargo
American Airlines	Northwest Airlines
American Int'l.	Reeve Aleutian Airways
American Trans Air	Reno
Amerijet	Ryan
Arrow Air	Simmons
Braniff Int'l.	Southwest Airlines
Carnival	Spirit
Casino Express	Tower Air
Challenge Air Transport	Trans States
Continental Air Lines	Trans World Airlines
Delta Air Lines	United Air Lines
Executive Airlines	United Parcel
Federal Express	U.S. Air
Fine Airlines	U.S. Air Shuttle
Hawaiian Airlines	Westair
Horizon Air	Zantop
Key	

TABLE 4.2[1]
AMERICAN FLAG AIRLINE TRAFFIC ENPLANED SYSTEM TOTAL
LARGE SCHEDULED CERTIFICATED AIR CARRIERS
SCHEDULED AND NONSCHEDULED OPERATIONS
1983–1992

Year	Enplaned Passenegers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	International			
1983	319,886,291	297,484,708	22,401,583	5,043,040	1,293,103.6	3,219,495.8
1984	344,831,718	321,136,409	23,695,309	5,449,541	1,389,154.7	3,579,216.1
1985	381,108,118	356,103,027	25,005,091	5,696,217	1,486,900.6	3,415,759.7
1986	418,563,577	393,267,950	25,295,582	6,401,599	2,066,173.6	4,718,544.1
1987	448,913,726	417,869,993	31,043,733	6,640,400	1,621,734.2	5,073,264.9
1988	456,026,372	420,326,215	35,700,157	6,724,445	1,717,738.7	5,860,039.0
1989	455,263,066	417,644,895	37,618,171	6,648,452	1,631,316.3	6,573,790.5
1990[2]	438,544,001	NA	NA	6,641,681	1,566,098.1	4,732,726.1
1991[2]	428,319,248	NA	NA	6,545,000	1,562,990.7	4,854,513.1
1992[2]	447,625,966	NA	NA	6,606,609	1,682,631.6	5,053,677.9

[1] Includes operations of certificated all-cargo carriers.
[2] Excludes traffic enplaned in foreign countries.
NA— No longer available.
Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.3*
AMERICAN FLAG AIRLINE TRAFFIC ENPLANED—50 STATES
LARGE SCHEDULED CERTIFICATED AIR CARRIERS
SCHEDULED AND NONSCHEDULED OPERATIONS
1983–1992

Year	Enplaned Passenegers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	International			
1983	301,347,773	292,962,603	8,385,170	4,825,467	1,227,581.1	2,558,106.8
1984	325,233,918	316,280,548	8,953,370	5,232,782	1,310,016.9	2,749,633.9
1985	360,710,517	351,346,625	9,363,892	5,476,633	1,416,643.1	2,548,025.1
1986	396,961,967	387,599,481	9,362,486	6,153,247	1,980,248.3	3,728,296.2
1987	422,747,715	411,311,165	11,436,550	6,372,793	1,534,719.8	3,948,060.7
1988	426,937,914	413,790,076	13,147,838	6,426,421	1,626,030.8	4,550,772.8
1989	425,103,192	411,139,530	13,963,662	6,331,555	1,537,234.6	5,116,092.4
1990	433,254,832	NA	NA	6,572,179	1,558,021.6	4,629,653.7
1991	422,601,128	NA	NA	6,456,329	1,550,220.5	4,750,582.2
1992	441,545,379	NA	NA	6,519,252	1,676,037.1	4,952,682.6

* Includes operations of certificated all-cargo carriers.
NA— No longer available.
Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.4*
AMERICAN FLAG AIRLINE TRAFFIC ENPLANED—U.S. TERRITORIES
LARGE SCHEDULED CERTIFICATED AIR CARRIERS
SCHEDULED AND NONSCHEDULED OPERATIONS
1983–1992

Year	Enplaned Passenegers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	International			
1983	2,372,861	1,788,115	584,746	34,942	6,035.8	68,088.1
1984	2,537,084	1,888,024	649,060	34,196	6,746.3	69,167.6
1985	2,630,980	1,940,298	690,682	29,026	6,799.9	53,001.9
1986	3,046,033	2,249,694	796,339	38,960	6,856.5	62,206.8
1987	4,068,330	2,940,763	1,127,567	39,690	7,389.6	66,511.0
1988	4,478,219	3,081,000	1,397,219	43,435	8,143.1	75,496.4
1989	4,551,410	2,974,207	1,577,203	41,978	7,693.8	83,661.0
1990	5,289,169	NA	NA	69,502	8,076.5	103,072.3
1991	5,718,120	NA	NA	88,671	12,770.2	103,931.0
1992	6,080,609	NA	NA	87,357	6,594.5	100,995.3

* Includes operations of certificated all-cargo carriers.
NA— No longer available.
Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.5*
AMERICAN FLAG AIRLINE TRAFFIC ENPLANED—FOREIGN COUNTRIES
LARGE SCHEDULED CERTIFICATED AIR CARRIERS
SCHEDULED AND NONSCHEDULED OPERATIONS
1983–1992

Year	Enplaned Passenegers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	International			
1983	16,165,657	2,733,990	13,431,667	182,631	59,486.7	593,300.9
1984	17,060,716	2,967,837	14,092,879	182,563	72,391.5	760,414.6
1985	17,766,621	2,816,104	14,950,517	190,558	63,477.6	814,732.7
1986	18,555,577	3,418,820	15,136,757	209,392	78,068.8	928,041.1
1987	22,097,681	3,618,065	18,479,616	227,917	79,624.7	1,058,693.2
1988	24,610,239	3,455,139	21,155,100	254,589	83,564.8	1,233,769.8
1989	25,608,464	3,531,158	22,077,306	274,919	86,387.8	1,374,037.1
1990	NA	NA	NA	NA	NA	NA
1991	NA	NA	NA	NA	NA	NA
1992	NA	NA	NA	NA	NA	NA

* Includes operations of certificated all-cargo carriers.
NA— No longer available.
Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1992

Carrier Group Air Carrier	Operation	Service	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
			Total Performed	Scheduled		Freight	Mail
MAJORS							
AMERICA WEST	TOTAL	S	203,899	205,678	15,087,663	43,401.93	45,027.53
		NS	624		22,507		
		AS	204,523	205,678	15,110,170	43,401.93	45,027.53
AMERICAN	TOTAL	S	870,582	882,722	79,336,223	434,422.86	274,339.18
		NS	332		20,684		
		AS	870,914	882,722	79,356,907	434,422.86	274,339.18
CONTINENTAL	TOTAL	S	454,857	461,709	35,625,687	194,636.28	102,578.70
		NS	2,604		295,506		
		AS	457,461	461,709	35,921,193	194,636.28	102,578.70
DELTA	TOTAL	S	963,658	970,825	78,801,890	436,865.93	361,283.54
		NS	925		53,533		
		AS	964,583	970,825	78,855,423	436,865.93	361,283.54
FEDERAL EXPRESS	TOTAL	S	228,273	228,273		2,499,977.52	17,514.02
		NS	1,243		28,339	4,584.01	
		AS	229,516	228,273	28,339	2,504,561.53	17,514.02
NORTHWEST	TOTAL	S	508,854	516,948	38,728,639	433,629.23	193,983.96
		NS	253		21,938	644.66	
		AS	509,107	516,948	38,750,577	434,273.89	193,983.96
SOUTHWEST	TOTAL	S	438,190	443,385	31,023,005	27,782.51	18,950.59
		NS	511		58,608		
		AS	438,701	443,385	31,081,613	27,782.51	18,950.59
TRANS WORLD	TOTAL	S	261,225	266,346	20,814,013	122,802.04	102,568.35
		NS	1,143		91,776		
		AS	262,368	266,346	20,905,789	122,802.04	102,568.35
UNITED	TOTAL	S	676,255	687,120	60,441,338	402,704.64	273,210.17
		NS	791		78,778		
		AS	677,046	687,120	60,520,116	402,704.64	273,210.17
US AIR	TOTAL	S	901,922	925,486	53,712,739	102,670.49	178,211.06
		NS	3,317		275,775	.04	
		AS	905,239	925,486	53,988,514	102,670.53	178,211.06
TOTAL, MAJORS	**TOTAL**	**S**	**5,807,715**	**5,588,492**	**413,571,197**	**4,698,893.43**	**1,567,667.10**
		NS	**11,743**		**947,444**	**5,228.71**	
		AS	**5,819,458**	**5,588,492**	**414,518,641**	**4,704,122.14**	**1,567,667.10**
NATIONALS							
AIR WISCONSIN	TOTAL	S	101,673	105,504	2,864,354	1,051.58	1,730.40
ALASKA	TOTAL	S	111,601	111,760	5,856,965	55,125.92	37,904.21
		NS	680		43,683	280.73	411.74
		AS	112,281	111,760	5,900,648	55,406.65	38,315.95
ALOHA	TOTAL	S	79,023	81,758	4,661,682	8,981.48	5,235.53
		NS	119		7,819	.63	.01
		AS	79,142	81,758	4,669,501	8,982.11	5,235.54
AMERICAN TRANS	TOTAL	S	3,346	3,346	462,296		
		NS	3,251		530,417		
		AS	6,597	3,346	992,713		
HAWAIIAN	TOTAL	S	66,498	68,449	4,569,259	17,579.68	4,751.68
		NS	955		71,323		
		AS	67,453	68,449	4,640,582	17,579.68	4,751.68
HORIZON AIR	TOTAL	S	187,188	192,928	2,244,371	5,649.76	2,119.28
MARKAIR	TOTAL	S	23,195	23,833	548,507	13,155.25	20,665.97
		NS	1,096		13,813	7,664.01	15.07
		AS	24,291	23,833	562,320	20,819.26	20,681.04
MIDWEST EXPRESS	TOTAL	S	21,855	22,062	808,025	4,458.10	6,543.10
		NS	201		9,749		
		AS	22,056	22,062	817,774	4,458.10	6,543.10
TOWER	TOTAL	S	1,021	1,021	322,200	983.98	
		NS	129		49,147		
		AS	1,150	1,021	371,347	983.98	
UNITED PARCEL	TOTAL	S	1,426	1,418		43,268.45	
		NS	169			37.62	
		AS	1,595	1,418		43,306.07	
US AIR SHUTTLE	TOTAL	S	21,399	22,260	1,469,248	83.74	166.20
		NS	246		34,210		
		AS	21,645	22,260	1,503,458	83.74	166.20
WESTAIR	TOTAL	S	169,171	189,132	2,112,613		

TABLE 4.6—Continued
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1992

Carrier Group Air Carrier	Operation	Service	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
			Total Performed	Scheduled		Freight	Mail
TOTAL, NATIONALS	**TOTAL**	**S**	**787,396**	**823,471**	**25,919,520**	**150,337.94**	**79,116.37**
		NS	**6,846**		**760,161**	**7,982.99**	**426.82**
		AS	**794,242**	**823,471**	**26,679,681**	**158,320.93**	**79,543.19**
LARGE REGIONALS							
AMERICAN INTL	TOTAL	S				666.31	30.78
		NS	4,469			666.31	30.78
		AS	4,469			1,332.62	61.56
AMERIJET	TOTAL	S	504			7,417.98	
		NS	270			3,453.58	13.67
		AS	774			10,871.56	13.67
ARROW	TOTAL	S	289	514		14,460.18	
		NS	541			17,021.62	
		AS	830	514		31,481.80	
BRANIFF INTL	TOTAL	S	5,414	5,608	517,954		
CARNIVAL	TOTAL	S	5,190	4,928	465,066	796.31	50.43
		NS	1,469		155,698	46.39	
		AS	6,659	4,928	620,764	842.70	50.43
CHALLENGE	TOTAL	S	1,836	1,836		45,287.66	1,587.45
		NS	30			861.27	
		AS	1,866	1,836		46,148.93	1,587.45
EXECUTIVE AIRLINES	TOTAL	S	34,291	35,559	689,726	6.49	10.07
		NS	3		37		
		AS	34,294	35,559	689,763	6.49	10.07
KEY	TOTAL	S	1,846	1,846	38,785		
		NS	114		7,906		
		AS	1,960	1,846	46,691		
KIWI	TOTAL	S	1,156	1,162	89,095		20.01
MGM GRAND	TOTAL	S	1,229	1,229	44,553	1,813.62	229.11
		NS	226		6,034		
		AS	1,455	1,229	50,587	1,813.62	229.11
NORTHERN AIR	TOTAL	S	7,788	6,549		17,147.09	19,720.20
		NS	281			1,758.39	30.38
		AS	8,069	6,549		18,905.48	19,750.58
REEVE	TOTAL	S	3,510	3,459	56,530	2,386.58	3,240.50
		NS	111		2,284	196.54	64.38
		AS	3,621	3,459	58,814	2,583.12	3,304.88
RENO	TOTAL	S	5,321	5,380	390,784	88.90	617.30
		NS	4		257		
		AS	5,325	5,380	391,041	88.90	617.30
SIMMONS	TOTAL	S	107,268	111,843	2,341,278	729.26	1,095.13
		NS	2		51		
		AS	107,270	111,843	2,341,329	729.26	1,095.13
TRANS STATES	TOTAL	S	97,274	100,851	1,322,183		
ZANTOP	TOTAL	S	6,533	7,403		64,714.00	6,915.60
		NS	2,239			7,304.33	
		AS	8,772	7,403		72,018.33	6,915.60
TOTAL, LARGE REGIONALS	**TOTAL**	**S**	**279,449**	**288,167**	**5,956,954**	**155,514.38**	**33,516.58**
		NS	**9,789**		**172,267**	**31,308.43**	**139.21**
		AS	**289,208**	**288,167**	**6,128,221**	**186,822.81**	**33,655.79**
MEDIUM REGIONALS							
AERIAL TRANSIT	TOTAL	S	52	52		631.74	3.50
		NS	104			1,353.80	
		AS	156	52		1,985.54	3.50
CASINO EXPRESS	TOTAL	S	1,784	1,784	150,991		
		NS	32		3,369		
		AS	1,816	1,784	154,360		
FINE AIRLINES	TOTAL	S	160	160			1,762.00
RYAN	TOTAL	S	130	130		2,426.48	
		NS	31				
		AS	161	130		2,426.48	
SPIRIT AIR	TOTAL	S	1,366	1,414	141,358		
		NS	42		3,727		
		AS	1,408	1,414	145,085		
TOTAL, MEDIUM REGIONALS	**TOTAL**	**S**	**3,492**	**3,540**	**292,349**	**3,058.22**	**1,765.50**
		NS	**209**		**7,096**	**1,353.80**	
		AS	**3,701**	**3,540**	**299,445**	**4,412.02**	**1,765.50**
OVER-ALL TOTAL, ALL CARRIERS	TOTAL	**S**	**6,578,082**	**6,703,670**	**445,739,020**	**5,007,803.97**	**1,682,066.55**
		NS	**28,557**		**1,886,968**	**45,873.93**	**566.03**
		AS	**6,606,639**	**6,703,670**	**447,625,988**	**5,053,677.90**	**1,682,631.58**

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, BY TYPE OF SERVICE, AND BY STATE AND U.S. AREA
12 MONTHS ENDED DECEMBER 31, 1992

State or County	Operation	Service	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
			Total Performed	Scheduled		Freight	Mail
50 U. S. STATES							
ALABAMA	TOTAL	S	40,208	40,618	1,825,687	12,882.18	6,869.21
		NS	20		872	9.04	
		AS	40,228	40,618	1,826,559	12,891.22	6,869.21
ALASKA	TOTAL	S	77,926	77,482	2,324,195	314,954.18	71,438.88
		NS	1,997		20,531	9,914.12	110.18
		AS	79,923	77,482	2,344,726	324,868.30	71,549.06
ARIZONA	TOTAL	S	165,818	167,365	11,959,701	50,125.89	29,123.33
		NS	374		14,260	3.04	.85
		AS	166,192	167,365	11,973,961	50,128.93	29,124.18
ARKANSAS	TOTAL	S	19,442	19,718	1,036,158	948.99	4,230.71
		NS	15		473	.71	
		AS	19,457	19,718	1,036,631	949.70	4,230.71
CALIFORNIA	TOTAL	S	729,634	739,720	55,620,081	758,358.05	173,973.22
		NS	2,563		190,054	2,094.50	2.80
		AS	732,197	739,720	55,810,135	760,452.55	173,976.02
COLORADO	TOTAL	S	179,434	182,251	14,438,312	80,252.04	43,754.45
		NS	309		12,651	14.27	1.09
		AS	179,743	182,251	14,450,963	80,266.31	43,755.54
CONNECTICUT	TOTAL	S	31,178	31,698	2,194,334	15,786.71	14,733.55
		NS	268		435	71.58	.62
		AS	31,446	31,698	2,194,769	15,858.29	14,734.17
DELAWARE	TOTAL	S	1	4		50.19	
		NS	34			20.00	
		AS	35	4		70.19	
DIST. OF COL	TOTAL	S	152,200	155,416	11,282,751	69,807.39	59,149.24
		NS	124		7,520	.05	
		AS	152,324	155,416	11,290,271	69,807.44	59,149.24
FLORIDA	TOTAL	S	400,326	404,687	32,784,757	285,000.45	82,264.95
		NS	3,480		307,608	18,106.38	13.67
		AS	403,806	404,687	33,092,365	303,106.83	82,278.62
GEORGIA	TOTAL	S	230,473	231,839	20,369,753	159,975.72	101,972.15
		NS	750		13,003	228.28	1.94
		AS	231,223	231,839	20,382,756	160,204.00	101,974.09
HAWAII	TOTAL	S	174,046	179,064	13,976,192	136,626.01	26,222.49
		NS	1,267		128,457	2.53	.07
		AS	175,333	179,064	14,104,649	136,628.54	26,222.56
IDAHO	TOTAL	S	37,320	38,004	785,670	4,712.55	2,374.48
		NS	11		403		
		AS	37,331	38,004	786,073	4,712.55	2,374.48
ILLINOIS	TOTAL	S	455,793	467,433	31,470,652	313,040.56	142,722.46
		NS	823		53,301	690.89	
		AS	456,616	467,433	31,523,953	313,731.45	142,722.46
INDIANA	TOTAL	S	81,857	83,449	3,462,822	146,727.45	13,391.09
		NS	1,089		72,652	116.16	14.14
		AS	82,946	83,449	3,535,474	146,843.61	13,405.23
IOWA	TOTAL	S	32,212	33,138	1,206,962	13,430.47	13,918.72
		NS	37		1,487	1.51	
		AS	32,249	33,138	1,208,449	13,431.98	13,918.72
KANSAS	TOTAL	S	12,721	12,825	573,939	7,468.82	2,772.20
		NS	20			.41	
		AS	12,741	12,825	573,939	7,469.23	2,772.20
KENTUCKY	TOTAL	S	31,478	31,902	1,280,234	8,965.66	7,445.11
		NS	184		2,667	44.02	
		AS	31,662	31,902	1,282,901	9,009.68	7,445.11
LOUISIANA	TOTAL	S	60,227	60,808	3,991,265	21,602.87	10,299.97
		NS	177		15,272	4.00	
		AS	60,404	60,808	4,006,537	21,606.87	10,299.97
MAINE	TOTAL	S	12,125	12,269	569,517	5,050.95	1,397.65
		NS	14		805		
		AS	12,139	12,269	570,322	5,050.95	1,397.65
MARYLAND	TOTAL	S	55,132	56,253	3,586,481	14,078.74	20,391.28
		NS	427		28,136	63.36	
		AS	55,559	56,253	3,614,617	14,142.10	20,391.28
MASSACHUSETTS	TOTAL	S	112,796	115,970	9,101,086	119,252.14	33,186.44
		NS	591		54,519	187.48	.97
		AS	113,387	115,970	9,155,605	119,439.62	33,187.41
MICHIGAN	TOTAL	S	182,937	186,846	11,844,574	93,690.94	46,828.21
		NS	1,738		93,273	5,009.16	.93
		AS	184,675	186,846	11,937,847	98,700.10	46,829.14
MINNESOTA	TOTAL	S	130,887	133,119	9,869,334	81,955.17	51,619.27
		NS	487		36,592	134.45	.35
		AS	131,374	133,119	9,905,926	82,089.62	51,619.62

TABLE 4.7—Continued
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, BY TYPE OF SERVICE, AND BY STATE AND U.S. AREA
12 MONTHS ENDED DECEMBER 31, 1992

State or County	Operation	Service	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
			Total Performed	Scheduled		Freight	Mail
MISSISSIPPI	TOTAL	S	8,098	8,156	367,565	500.61	1,675.41
MISSOURI	TOTAL	S	239,966	244,048	13,951,082	66,588.05	60,783.10
		NS	1,193		41,504	330.66	1.13
		AS	241,159	244,048	13,992,586	66,918.71	60,784.23
MONTANA	TOTAL	S	44,952	45,707	894,754	9,245.00	3,509.97
		NS	12		430	.45	
		AS	44,964	45,707	895,184	9,245.45	3,509.97
NEBRASKA	TOTAL	S	22,617	22,745	1,231,022	7,631.95	19,653.65
		NS	7		290		
		AS	22,624	22,745	1,231,312	7,631.95	19,653.65
NEVADA	TOTAL	S	115,696	116,265	9,947,287	18,417.47	16,004.93
		NS	1,536		239,282		
		AS	117,232	116,265	10,186,569	18,417.47	16,004.93
EW HAMPSHIRE	TOTAL	S	7,390	7,515	280,708	9,131.91	537.73
		NS	27		1,423	.04	
		AS	7,417	7,515	282,131	9,131.95	537.73
NEW JERSEY	TOTAL	S	135,938	139,454	10,510,594	176,722.99	41,244.50
		NS	1,136		122,261	321.25	
		AS	137,074	139,454	10,632,855	177,044.24	41,244.50
NEW MEXICO	TOTAL	S	35,773	36,005	2,505,111	10,490.97	7,063.17
		NS	23		1,893	.19	
		AS	35,796	36,005	2,507,004	10,491.16	7,063.17
NEW YORK	TOTAL	S	298,029	306,318	22,744,908	281,748.33	111,574.47
		NS	1,867		113,889	1,080.59	1.35
		AS	299,896	306,318	22,858,797	282,828.92	111,575.82
NORTH CAROLINA	TOTAL	S	218,859	223,162	13,923,505	70,743.52	36,302.45
		NS	110		4,772	100.32	
		AS	218,969	223,162	13,928,277	70,843.84	36,302.45
NORTH DAKOTA	TOTAL	S	12,724	12,785	531,711	4,488.55	1,980.19
OHIO	TOTAL	S	207,241	210,465	12,150,069	68,918.30	52,299.49
		NS	1,916		57,000	1,434.30	
		AS	209,157	210,465	12,207,069	70,352.60	52,299.49
OKLAHOMA	TOTAL	S	52,518	53,078	2,919,971	15,931.62	10,378.89
		NS	70		1,767	32.32	
		AS	52,588	53,078	2,921,738	15,963.94	10,378.89
OREGON	TOTAL	S	116,492	118,386	4,036,354	43,861.26	13,266.75
		NS	66		2,676	1.11	5.61
		AS	116,558	118,386	4,039,030	43,862.37	13,272.36
PENNSYLVANIA	TOTAL	S	264,490	269,936	16,418,439	96,551.64	83,559.48
		NS	1,072		82,902	112.60	2.10
		AS	265,562	269,936	16,501,341	96,664.24	83,561.58
RHODE ISLAND	TOTAL	S	16,154	16,462	975,568	2,362.53	3,957.56
		NS	14		1,311		
		AS	16,168	16,462	976,879	2,362.53	3,957.56
SOUTH CAROLINA	TOTAL	S	27,352	27,631	1,676,752	7,892.82	6,299.19
		NS	77		3,778	1.68	
		AS	27,429	27,631	1,680,530	7,894.50	6,299.19
SOUTH DAKOTA	TOTAL	S	11,186	11,313	371,616	2,307.61	2,224.08
		NS	10			1.26	
		AS	11,196	11,313	371,616	2,308.87	2,224.08
TENNESSEE	TOTAL	S	174,106	175,597	8,667,107	805,222.29	29,706.06
		NS	214		5,282	226.65	
		AS	174,320	175,597	8,672,389	805,448.94	29,706.06
TEXAS	TOTAL	S	629,974	636,527	48,834,075	277,881.35	136,496.00
		NS	765		34,959	648.30	1.17
		AS	630,739	636,527	48,869,034	278,529.65	136,497.17
UTAH	TOTAL	S	76,462	77,233	5,656,947	43,339.75	20,871.17
		NS	342		46,426	10.56	
		AS	76,804	77,233	5,703,373	43,350.31	20,871.17
VERMONT	TOTAL	S	5,655	5,835	267,767	2,141.47	1,112.13
VIRGINIA	TOTAL	S	49,354	50,629	2,262,666	12,200.85	9,307.24
		NS	74		2,330	14.42	
		AS	49,428	50,629	2,264,996	12,215.27	9,307.24
WASHINGTON	TOTAL	S	224,652	245,639	9,628,157	134,885.32	37,329.90
		NS	490		31,981	1,268.12	407.06
		AS	225,142	245,639	9,660,138	136,153.44	37,736.96
WEST VIRGINIA	TOTAL	S	6,001	6,116	191,952	1,232.38	169.81
WISCONSIN	TOTAL	S	76,906	78,984	3,012,273	24,143.05	8,076.25
		NS	450		13,149	25.57	
		AS	77,356	78,984	3,025,422	24,168.62	8,076.25
WYOMING	TOTAL	S	6,198	6,243	168,110	1,030.58	8.43
		NS	8		576		
		AS	6,206	6,243	168,686	1,030.58	8.43

TABLE 4.7—Continued
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, BY TYPE OF SERVICE, AND BY STATE AND U.S.AREA
12 MONTHS ENDED DECEMBER 31, 1992

State or County	Operation	Service	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
			Total Performed	Scheduled		Freight	Mail
TOTAL FOR 50 U. S. STATES	**TOTAL**	**S**	**6,490,954**	**6,614,112**	**439,680,627**	**4,910,356.29**	**1,675,471.06**
		NS	**28,298**		**1,664,852**	**42,326.33**	**566.03**
		AS	**6,519,252**	**6,614,112**	**441,545,379**	**4,952,682.62**	**1,676,037.09**
OTHER U. S. AREAS.							
AMERICAN SAMOA	TOTAL	S	361	359	26,387	77.76	74.93
PALAU ISLANDS	TOTAL	S	781	782	41,863	1,197.18	28.19
GUAM	TOTAL	S	8,410	8,734	925,421	19,267.56	2,431.82
		NS	20		1,769	.08	
		AS	8,430	8,734	927,190	19,267.64	2,431.82
JOHNSTON ISLAND	TOTAL	S	249	261	174	.76	2.06
MARIANA ISLANDS	TOTAL	S	6,039	6,416	375,659	5,070.87	310.30
		NS	9		492		
		AS	6,048	6,416	376,151	5,070.87	310.30
PUERTO RICO	TOTAL	S	57,298	58,679	4,093,709	70,724.02	3,289.01
		NS	227		19,654	3,547.52	
		AS	57,525	58,679	4,113,363	74,271.54	3,289.01
U.S. VIRGIN ISLANDS	TOTAL	S	13,980	14,327	595,280	1,109.53	458.18
		NS	3		201		
		AS	13,983	14,327	595,481	1,109.53	458.18
TOTAL FOR OTHER U. S. AREAS	**TOTAL**	**S**	**87,069**	**89,558**	**6,058,493**	**97,447.88**	**6,594.49**
		NS	**259**		**22,116**	**3,547.80**	
		AS	**87,357**	**89,558**	**6,080,609**	**100,995.28**	**6,594.49**
OVERALL TOTAL FOR ALL STATES, AND OTHER U.S. AREAS.	**TOTAL**	**S**	**6,578,052**	**6,703,670**	**445,739,020**	**5,007,803.97**	**1,682,065.55**
		NS	**28,557**		**1,686,968**	**45,873.93**	**566.03**
		AS	**6,606,609**	**6,703,670**	**447,625,988**	**5,053,677.90**	**1,682,631.58**

TABLE 4.8
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Mail
ATLANTA, GEORGIA						
(FULTON COUNTY)	0.00	50	50		7.92	
(WILLIAM B HARTSFIELD INT'L)	4.39	216,782	217,250	19,659,882	158,071.64	101,559.74
COMMUNITY TOTAL	4.39	216,832	217,300	19,659,882	158,079.56	101,559.74
BOSTON, MASSACHUSETTS						
(LOGAN INTERNATIONAL)	2.03	110,514	112,912	9,087,607	119,184.46	33,185.97
CHARLOTTE, NORTH CAROLINA						
(DOUGLAS MUNI)	1.84	128,019	130,903	8,220,185	39,762.72	23,204.39
CHICAGO, ILLINOIS						
(MEIGS FIELD)	0.00	1,048	1,216	6,984		
(MIDWAY)	0.44	30,827	31,460	1,971,557	2,252.04	27.04
(O'HARE INTERNATIONAL)	6.40	378,153	386,291	28,666,774	309,414.94	142,132.35
COMMUNITY TOTAL	6.85	410,028	418,967	30,645,315	311,666.98	142,159.39
CINCINNATI, OHIO						
(GREATER CINCINNATI)	1.10	73,089	73,700	4,903,127	21,095.65	21,801.18
DALLAS/FT.WORTH, TEXAS						
(DALLAS/FT.WORTH INTL)	5.46	280,846	282,953	24,427,582	151,949.85	96,669.91
(LOVE FIELD)	0.66	42,649	43,526	2,942,967	2,491.89	643.01
(MEACHAM FIELD)	0.00	3	3			
COMMUNITY TOTAL	6.11	323,498	326,482	27,370,549	154,441.74	97,312.92
DENVER, COLORADO						
(STAPLETON INTERNATIONAL)	3.00	160,990	163,076	13,426,038	79,128.51	42,181.59
DETROIT, MICHIGAN						
(DETROIT CITY)	0.06	3,703	3,769	284,071	242.71	
(WAYNE COUNTY)	2.26	136,589	138,650	10,124,448	57,871.61	40,071.43
(WILLOW RUN)	0.00	3,629	2,852		34,130.43	1,235.77
COMMUNITY TOTAL	2.33	143,921	145,271	10,408,519	92,244.75	41,307.20
HONOLULU, OAHU, HAWAII						
(HICKAM AFB)	0.00	1			.26	
(HONOLULU INTERNATIONAL)	1.95	90,410	91,501	8,740,091	112,841.98	21,419.26
COMMUNITY TOTAL	1.95	90,411	91,501	8,740,091	112,842.24	21,419.26
HOUSTON, TEXAS						
(ELLINGTON FIELD)	0.00	245	239		2,066.95	
(HOUSTON INTERCONTINENTAL)	1.86	106,927	107,748	8,308,479	70,456.35	21,002.23
(WILLIAM P HOBBY)	0.89	59,603	60,591	4,001,789	4,946.39	734.21
COMMUNITY TOTAL	2.75	166,775	168,578	12,310,248	77,469.69	21,736.44
LAS VEGAS, NEVADA						
(MC CARRAN INTL)	1.88	91,485	90,367	8,435,624	12,798.45	13,560.16
LOS ANGELES/BURBNK/LNG.BCH, CAL						
(HOLLYWOOD-BURBANK)	0.42	24,192	24,311	1,861,872	6,831.18	2,313.16
(LONG BEACH)	0.09	6,663	6,701	400,067	12,068.84	831.37
(LOS ANGELES INTERNATIONAL)	4.09	195,680	197,184	18,304,696	361,454.56	68,353.13
(ORANGE COUNTY)	0.59	33,081	33,529	2,637,841	2,202.86	79.82
COMMUNITY TOTAL	5.18	259,616	261,725	23,204,476	382,557.44	71,577.48
MIAMI/FT LAUDERDALE, FLORIDA						
(FT LAUDERDALE-HOLLYWOOD INTL)	0.77	37,820	37,546	3,437,643	41,781.76	8,049.71
(MIAMI INTERNATIONAL)	2.01	99,762	99,920	8,980,826	184,075.94	23,727.73
(OPA LOCKA)	0.00	16			1.44	
COMMUNITY TOTAL	2.77	137,598	137,466	12,418,469	225,859.14	31,777.44

TABLE 4.8—Continued
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Mail
MINNEAPOLIS/ST. PAUL, MINNESOTA						
(MINNEAPOLIS-ST PAUL INTL)	2.15	125,214	126,603	9,640,278	81,571.76	51,613.02
NEWARK, NEW JERSEY						
(NEWARK)	2.33	134,304	136,692	10,442,112	176,991.22	41,244.50
NEW YORK, NEW YORK						
(JOHN F KENNEDY INTL)	1.86	69,545	70,067	8,347,648	221,091.26	58,660.27
(LA GUARDIA)	2.06	121,128	125,188	9,206,582	23,585.12	37,010.22
(WEST 30TH ST HELIPRT)	0.00	52	52		8.67	
COMMUNITY TOTAL	3.92	190,725	195,307	17,554,230	244,685.05	95,670.49
ORLANDO, FLORIDA						
(ORLANDO INTERNATIONAL)	1.91	96,668	96,156	8,535,628	32,686.44	13,123.75
PHILADELPHIA,PA/CAMDEN, NJ						
(PHILADELPHIA INTL)	1.53	97,439	98,835	6,827,030	53,345.28	49,688.43
PHOENIX, ARIZONA						
(PHOENIX SKY HARBOR INTL)	2.39	143,816	144,758	10,713,112	45,549.02	26,238.46
PITTSBURGH, PA/WHEELING, W VA						
(GREATER PITTSBURGH)	1.91	140,158	142,632	8,557,030	29,397.10	30,684.43
ST. LOUIS, MISSOURI						
(LAMBERT-ST LOUIS MUNI)	2.30	177,557	180,199	10,299,655	50,548.94	40,254.72
(SPIRIT OF ST. LOUIS)	0.00	3			.04	
COMMUNITY TOTAL	2.30	177,560	180,199	10,299,655	50,548.98	40,254.72
SALT LAKE CITY, UTAH						
(SALT LAKE CITY INTL)	1.27	76,362	76,794	5,703,273	43,236.84	20,871.17
SAN DIEGO, CALIFORNIA						
(BROWN FIELD MUNICIPAL)	0.00	10			.64	1.40
(MONTGOMERY FIELD)	0.00	1	1		1.13	
(SAN DIEGO INTL-LINDBERGH)	1.26	69,867	70,462	5,631,471	19,796.82	8,390.04
COMMUNITY TOTAL	1.26	69,878	70,463	5,631,471	19,798.59	8,391.44
SAN FRANCISCO/OAKLAND, CAL						
(OAKLAND METROPOLITAN INTL)	0.67	46,689	46,866	3,009,394	103,735.02	4,101.70
(SAN FRANCISCO INTL)	3.17	169,491	171,720	14,192,658	204,656.96	63,202.12
COMMUNITY TOTAL	3.84	216,180	218,586	17,202,052	308,391.98	67,303.82
SEATTLE/TACOMA, WASHINGTON						
(BOEING FIELD INTL)	0.00	27	6	807	6.90	3.10
(SEATTLE-TACOMA INTERNATIONAL)	1.87	144,780	163,430	8,355,011	124,630.01	34,545.71
COMMUNITY TOTAL	1.87	144,807	163,436	8,355,818	124,636.91	34,548.81
WASHINGTON, DIST. OF COL.						
(DULLES INTERNATIONAL)	1.00	60,051	60,926	4,464,895	61,606.88	29,593.83
(WASHINGTON NATIONAL)	1.52	92,273	94,490	6,825,376	8,200.56	29,555.41
COMMUNITY TOTAL	2.52	152,324	155,416	11,290,271	69,807.44	59,149.24
OVER-ALL TOTAL, LARGE HUBS	71.39	4,078,211	4,144,326	319,582,090	3,067,777.94	1,201,546.44

TABLE 4.9
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT MEDIUM AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Express
ALBUQUERQUE, NEW MEXICO						
(ALBUQUERQUE INTL)	0.56	34,105	34,318	2,506,884	9,964.91	7,063.17
ANCHORAGE, ALASKA						
(ANCHORAGE INTERNATIONAL)	0.30	36,929	36,098	1,363,849	289,192.80	58,485.75
(ELMENDORF AFB)	0.00	1				
COMMUNITY TOTAL	0.30	36,930	36,098	1,363,849	289,192.80	58,485.75
AUSTIN, TEXAS						
(ROBERT MUELLER MUNI)	0.48	32,304	32,616	2,127,563	11,036.91	3,865.61
BALTIMORE, MARYLAND						
(BALTO/WASH INTL)	0.81	54,919	55,615	3,614,491	13,654.98	20,391.28
BUFFALO & NIAGARA FALLS, NEW YORK						
(GREATER BUFFALO INTERNATIONAL)	0.33	28,130	28,249	1,484,181	6,573.24	4,233.45
CLEVELAND, OHIO						
(HOPKINS INTERNATIONAL)	0.84	63,649	64,170	3,740,901	23,119.36	11,628.00
COLUMBUS, OHIO						
(LOCKBOURNE AFB)	0.00	1,797	1,683		7,605.51	
(PORT COLUMBUS INTERNATIONAL)	0.49	38,638	39,145	2,201,054	6,258.42	14,746.60
COMMUNITY TOTAL	0.49	40,435	40,828	2,201,054	13,863.93	14,746.60
EL PASO, TEXAS						
(EL PASO INTERNATIONAL)	0.38	27,274	27,369	1,700,549	5,986.48	1,926.80
FORT MYERS, FLORIDA						
(PAGE FIELD)	0.00	1	1		.09	
(SOUTHWEST)	0.35	20,022	20,117	1,584,414	2,333.98	2,315.20
COMMUNITY TOTAL	0.35	20,023	20,118	1,584,414	2,334.07	2,315.20
HARTFORD/SPRNGFLD/WESTFLD, CT						
(BRADLEY INTERNATIONAL)	0.48	30,126	30,314	2,131,225	15,852.43	14,726.78
INDIANAPOLIS, INDIANA						
(INDIANAPOLIS INTERNATIONAL)	0.63	55,625	55,231	2,803,504	143,498.45	10,229.90
JACKSONVILLE, FLORIDA						
(CECIL FIELD NAS)	0.00	3			6.16	
(JACKSONVILLE INTERNATIONAL)	0.26	19,698	19,876	1,179,087	9,072.17	7,440.60
COMMUNITY TOTAL	0.26	19,701	19,876	1,179,087	9,078.33	7,440.60
KAHULUI, MAUI, HAWAII						
(KAHULUI)	0.52	31,696	33,063	2,318,505	11,265.08	1,775.47
KANSAS CITY, MISSOURI						
(KANSAS CITY INTL)	0.78	52,416	52,352	3,482,243	15,345.40	20,524.59
(KANSAS CITY MUNI)	0.00	2		91		
COMMUNITY TOTAL	0.78	52,418	52,352	3,482,334	15,345.40	20,524.59
MEMPHIS, TENNESSEE						
(MEMPHIS INTERNATIONAL)	0.74	88,184	88,685	3,329,210	781,828.03	15,435.13
MILWAUKEE, WISCONSIN						
(GENERAL MITCHELL FIELD)	0.43	40,607	40,948	1,938,384	17,344.97	7,172.58
NASHVILLE, TENNESSEE						
(METROPOLITAN)	1.00	68,955	69,559	4,461,221	10,834.57	12,245.91

TABLE 4.9—Continued
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT MEDIUM AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Express
NEW ORLEANS, LOUISIANA						
(NEW ORLEANS INTL)	0.72	41,739	42,054	3,231,972	14,996.54	6,596.85
OKLAHOMA CITY, OKLAHOMA						
(TINKER AFB)	0.00	1	1		11.00	
(WILL ROGERS WORLD)	0.34	25,907	26,099	1,511,053	7,022.87	4,969.47
COMMUNITY TOTAL	0.34	25,908	26,100	1,511,053	7,033.87	4,969.47
ONTARIO/SAN BERNARD/RIVERSE,CA						
(MARCH AFB)	0.00	1	2		1.21	
(ONTARIO INTERNATIONAL)	0.66	41,493	41,741	2,965,837	11,078.59	11,955.33
COMMUNITY TOTAL	0.66	41,494	41,743	2,965,937	11,079.80	11,955.33
PORTLAND, OREGON						
(PORTLAND INTERNATIONAL)	0.78	83,794	84,948	3,500,423	41,431.89	12,035.89
RALEIGH/DURHAM, NORTH CAROLINA						
(RALEIGH-DURHAM)	0.98	60,835	61,530	4,376,097	16,007.79	9,695.58
RENO, NEVADA						
(RENO INTL)	0.37	24,960	25,121	1,674,708	5,617.83	2,444.77
SACRAMENTO, CALIFORNIA						
(SACRAMENTO METROPOLITAN)	0.56	40,138	40,513	2,485,878	9,370.33	8,532.06
SAN ANTONIO, TEXAS						
(SAN ANTONIO INTERNATIONAL)	0.59	36,450	36,716	2,638,589	12,297.79	8,591.27
SAN JOSE, CALIFORNIA						
(SAN JOSE MUNI)	0.69	41,625	42,079	3,091,997	24,343.93	5,057.83
SAN JUAN, PUERTO RICO						
(LUIS MUNOZ MARIN INTL)	0.88	50,625	51,520	3,948,210	68,758.35	[illegible],288.85
TAMPA & ST.PTSBG/CLWTR & LKLND,FLA						
(ST. PETERSBURG/CLWTR INTL)	0.01	385	327	44,645		
(TAMPA INTERNATIONAL)	0.98	57,466	57,963	4,378,851	25,665.53	20,253.70
COMMUNITY TOTAL	0.99	57,851	58,290	4,423,496	25,665.53	20,253.70
TUCSON, ARIZONA						
(TUCSON INTL)	0.27	18,212	18,360	1,209,173	3,925.51	2,878.36
TULSA, OKLAHOMA						
(TULSA INTL)	0.31	26,613	26,909	1,409,347	8,928.93	5,409.41
WEST PALM BEACH/PALM BEACH,FLA						
(PALM BEACH INTERNATIONAL)	0.53	26,652	26,963	2,366,819	2,904.02	5,134.98
OVER-ALL TOTAL, MEDIUM HUBS	18.06	1,301,977	1,312,257	80,800,966	1,633,136.06	321,061.17

TABLE 4.10
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Mail
ALBANY, NEW YORK						
(ALBANY COUNTY)	0.18	14,704	14,943	786,080	2,450.23	3,066.95
ALLENTOWN/BETHLEHEM/EASTON, PA						
(ALLENTOWN-BETHLEHEM-EASTON)	0.08	7,820	7,958	349,951	2,571.11	663.04
AMARILLO/BORGER, TEXAS						
(AMARILLO AIR TERMINAL)	0.09	6,091	6,147	411,780	309.30	803.79
BATON ROUGE, LOUISIANA						
(RYAN)	0.09	8,314	8,422	423,313	435.70	1,981.72
BILLINGS, MONTANA						
(LOGAN FIELD)	0.06	9,886	9,996	285,378	547.59	1,793.37
BIRMINGHAM, ALABAMA						
(BIRMINGHAM MUNI)	0.21	18,453	18,577	958,539	6,003.52	5,755.01
BOISE, IDAHO						
(BOISE AIR TERMINAL/GOWEN FLD)	0.13	19,185	19,431	589,620	3,713.31	2,275.14
BROWNSVILLE/HRLGN/SAN BNTO, TEX						
(HARLINGEN INDUSTRIAL AIRPARK)	0.11	7,094	7,143	500,470	6,407.21	6.21
(SOUTH PADRE ISLAND INTL)	0.00	15	5		29.11	
COMMUNITY TOTAL	0.11	7,109	7,148	500,470	6,436.32	6.21
BURLINGTON, VERMONT						
(BURLINGTON INTERNATIONAL)	0.06	5,390	5,570	267,767	1,999.46	1,112.13
CEDAR RAPIDS/IOWA CITY, IOWA						
(CEDAR RAPIDS MUNI)	0.08	10,373	10,704	378,403	9,606.99	3,349.67
CHARLESTON, SOUTH CAROLINA						
(CHARLESTON AFB/MUNI)	0.13	9,629	9,659	592,408	2,154.33	901.05
CHARLOTTE AMALIE,ST. THOMAS, VI						
(HARRY S.TRUMAN)	0.10	8,882	9,085	448,395	719.61	343.46
COLORADO SPRINGS, COLORADO						
(PETERSON FIELD)	0.16	11,285	11,440	698,777	394.94	1,339.68
COLUMBIA, SOUTH CAROLINA						
(COLUMBIA METROPOLITAN)	0.10	8,419	8,478	452,350	4,827.10	2,608.44
CORPUS CHRISTI, TEXAS						
(CORPUS CHRISTI INTERNATIONAL)	0.11	7,429	7,518	474,504	319.26	619.12
DAYTON, OHIO						
(JAMES M COX/DAYTON INTL)	0.21	18,620	18,903	933,753	11,623.57	3,305.16
DAYTONA BEACH, FLORIDA						
(DAYTONA BEACH REGIONAL)	0.09	6,540	6,582	414,790	422.99	7.61
DES MOINES, IOWA						
(DES MOINES MUNI)	0.15	10,956	11,048	677,807	3,512.71	10,539.54

TABLE 4.10—Continued
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Mail
EUGENE, OREGON						
(MAHLON SWEET FIELD)	0.06	11,357	11,579	277,504	835.94	746.15
FAIRBANKS, ALASKA						
(FAIRBANKS INTERNATIONAL)	0.06	7,295	7,091	262,709	4,322.76	7,573.04
FORT WAYNE, INDIANA						
(MUNICIPAL/BAER FIELD)	0.05	8,555	8,798	243,065	1,323.77	1,359.11
FRESNO, CALIFORNIA						
(FRESNO AIR TERMINAL)	0.07	15,892	16,239	330,674	1,206.34	1,036.56
(FRESNO CHANDLER)	0.00	1	1		1.33	
COMMUNITY TOTAL	0.07	15,893	16,240	330,674	1,207.67	1,036.56
GRAND RAPIDS, MICHIGAN						
(KENT COUNTY)	0.14	12,182	12,340	622,850	4,948.36	3,883.74
GREEN BAY/CLINTONVILLE, WIS.						
(AUSTIN-STRAUBEL FIELD)	0.06	9,851	10,177	254,281	125.59	46.40
GREENSBORO/HIGH PT/WINSTN,N.C.						
(GREENSBORO-HIGH PT-WINSTN REG.)	0.19	20,748	21,163	848,948	13,617.21	3,338.96
GREENVILLE/SPARTANBURG, SC						
(GREENVILLE/SPARTANBURG)	0.09	6,792	6,879	423,578	609.58	2,789.61
GUAM, GUAM						
(AGANA FIELD)	0.21	8,428	8,734	927,190	19,267.48	2,431.82
(ANDERSON AFB)	0.00	2			.16	
COMMUNITY TOTAL	0.21	8,430	8,734	927,190	19,267.64	2,431.82
HARRISBURG/YORK, PA.						
(HARRISBURG INTERNATIONAL)	0.12	12,602	12,861	515,660	8,528.89	2,519.85
HILO, HAWAII, HAWAII						
(GENERAL LYMAN FIELD)	0.16	12,065	12,042	703,736	4,325.17	1,120.59
HUNTSVILLE, ALABAMA						
(MADISON COUNTY)	0.09	9,617	9,770	407,079	672.90	525.05
INDIO/PALM SPRINGS, CALIFORNIA						
(PALM SPRINGS MUNI)	0.07	8,185	8,300	312,769	110.60	3.91
ISLIP, LONG ISLAND, NEW YORK						
(LONG ISLAND-MACARTHUR)	0.08	4,774	4,886	375,254	234.47	1,263.69
JACKSON-VICKSBURG, MISS.						
(ALLEN C THOMPSON FIELD)	0.08	7,841	7,900	367,540	272.83	1,675.41
JUNEAU, ALASKA						
(JUNEAU MUNI)	0.05	5,134	5,246	234,393	4,161.46	1,501.51

TABLE 4.10—Continued
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Mail
KAILUA-KONA, HAWAII, HAWAII						
(KE-AHOLE)	0.23	16,462	16,697	1,021,356	6,838.56	1,003.94
KNOXVILLE, TENNESSEE						
(MC GHEE TYSON)	0.12	10,411	10,502	534,998	11,159.14	1,506.04
LANSING, MICHIGAN						
(CAPITAL CITY)	0.05	7,158	7,323	234,357	95.29	641.81
LEXINGTON/FRANKFORT, KENTUCKY						
(BLUE GRASS)	0.07	8,932	9,028	310,419	374.90	1,135.42
LIHUE, KAUAI, HAWAII						
(LIHUE)	0.25	16,696	17,933	1,111,530	949.25	798.98
LITTLE ROCK, ARKANSAS						
(ADAMS FIELD)	0.22	16,622	16,785	995,424	947.39	4,230.26
LOUISVILLE, KENTUCKY						
(STANDIFORD FIELD)	0.22	20,698	20,820	963,178	7,891.18	6,309.69
LUBBOCK, TEXAS						
(LUBBOCK INTL)	0.13	10,858	10,933	563,333	8,035.09	582.72
MADISON, WISCONSIN						
(TRUAX FIELD)	0.12	13,662	14,127	524,474	3,262.06	812.21
MANCHESTER/CONCORD,N.HAMPSHIRE						
(MUNICIPAL)	0.06	7,391	7,489	282,131	9,126.20	537.73
MELBOURNE, FLORIDA						
(CAPE KENNEDY REGIONAL)	0.07	4,845	4,887	315,398	231.73	.89
MIDLAND/ODESSA, TEXAS						
(MIDLAND/ODESSA REGL)	0.11	7,719	7,769	506,780	626.68	418.83
MISSION/MCALLEN/EDINBURG, TEXAS						
(MILLER INTERNATIONAL)	0.06	3,339	3,365	253,346	808.97	632.64
MOBILE, AL/PASCAGOULA, MISS						
(BATES FIELD)	0.07	8,572	8,661	320,819	5,682.81	477.08
MOLINE, ILLINOIS						
(QUAD-CITY)	0.07	10,468	10,776	296,521	217.12	530.91
NEWBURGH, NEW YORK						
(STEWART)	0.07	5,165	5,177	325,112	6,409.60	898.16
NORFLK/VA BCH/PTSMH/CHESPKE, VA						
(CHAMBERS NAS)	0.00	10			4.16	
(NORFOLK REGIONAL)	0.25	21,637	22,077	1,116,618	4,997.18	4,578.61
COMMUNITY TOTAL	0.25	21,647	22,077	1,116,618	5,001.34	4,578.61
OMAHA, NEBRASKA						
(EPPLEY AIRFIELD)	0.23	17,167	17,221	1,038,245	7,001.53	18,567.75
PENSACOLA, FLORIDA						
(PENSACOLA REGIONAL)	0.09	8,740	8,911	390,369	487.20	1,130.73
PORTLAND, MAINE						
(PORTLAND INTERNATIONAL JETPORT)	0.10	8,171	8,331	447,248	3,805.44	1,030.82

TABLE 4.10—Continued
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1992

Community (Airport Name)	% of Enplanements	Aircraft Departures		Enplaned Passengers	Enplaned Revenue Tons	
		Total Performed	Scheduled		Freight	Mail
PROVIDENCE, RHODE ISLAND (THEODORE FRANCIS GREEN STATE)	0.22	16,168	16,462	976,879	2,362.53	3,957.56
RICHMOND, VIRGINIA (RICHARD E BYRD FLYING FIELD)	0.20	18,991	19,363	882,368	7,079.91	4,127.98
ROCHESTER, NEW YORK (ROCHESTER-MONROE COUNTY)	0.23	23,249	23,688	1,018,125	9,070.86	2,727.83
SAGINAW/BAY CITY/MIDLAND, MICH (TRI CITY)	0.05	3,820	3,853	231,478	608.11	553.23
SAIPAN, MARIANA ISLANDS (SAIPAN INTERNATIONAL)	0.08	4,937	5,136	359,721	4,955.16	304.67
SARASOTA/BRADENTON, FLORIDA (SARASOTA-BRADENTON)	0.19	11,517	11,616	840,157	525.63	7.53
SAVANNAH, GEORGIA (SAVANNAH INTL)	0.11	9,310	9,427	480,296	1,597.91	395.00
SHREVEPORT, LOUISIANA (SHREVEPORT REGIONAL)	0.05	6,571	6,549	224,223	5,765.29	1,595.92
SIOUX FALLS, SOUTH DAKOTA (JOE FOSS FIELD)	0.06	6,956	7,049	257,834	1,337.37	1,767.96
SOUTH BEND, INDIANA (MICHIANA REGIONAL)	0.08	11,927	12,364	356,377	1,949.57	1,270.15
SPOKANE, WASHINGTON (SPOKANE INTERNATIONAL)	0.20	32,549	32,951	875,361	9,447.64	2,683.45
SYRACUSE, NEW YORK (CLARENCE E HANCOCK)	0.21	23,356	23,887	918,602	11,920.72	3,709.32
TALLAHASSEE, FLORIDA (TALLAHASSEE MUNI)	0.08	7,567	7,680	338,478	1,463.15	652.02
TOLEDO, OHIO (TOLEDO EXPRESS)	0.05	7,072	6,359	244,646	567.79	181.00
WICHITA, KANSAS (MID-CONTINENT)	0.13	12,410	12,494	572,136	7,403.05	2,772.20
OVER-ALL TOTAL, SMALL HUBS	**8.24**	**771,529**	**783,305**	**36,879,632**	**267,619.05**	**144,917.53**

TABLE 4.11
TOP 100 AIRPORTS
IN RANK ORDER BY TOTAL ENPLANED PASSENGERS
LARGE SCHEDULED CERTIFICATED AIR CARRIERS
SCHEDULED AND NON SCHEDULED OPERATIONS
1992

Rank	Airport	Total Enplaned Passengers	Rank	Airport	Total Enplaned Passengers
1	Chicago (O'Hare), IL	28,666,774	51	Kahului, Maui, HI	2,318,505
2	Dallas/Ft. Worth (Regional), TX	24,427,582	52	Columbus, OH	2,201,054
3	Atlanta, GA	19,659,882	53	Hartford, CT	2,131,225
4	Los Angeles, CA	18,304,696	54	Austin, TX	2,127,563
5	San Francisco, CA	14,192,658	55	Chicago (Midway), IL	1,971,557
6	Denver, CO	13,426,038	56	Milwaukee, WI	1,938,384
7	Phoenix, AZ	10,713,112	57	Burbank, CA	1,861,872
8	Newark, NJ	10,442,112	58	El Paso, TX	1,700,549
9	St. Louis, MO	10,299,655	59	Reno, NV	1,674,708
10	Detroit, MI	10,124,448	60	Ft. Myers, FL	1,584,414
11	Minneapolis/St. Paul, MN	9,640,278	61	Oklahoma City, OK	1,511,053
12	New York (La Guardia), NY	9,206,582	62	Buffalo, NY	1,484,181
13	Boston, MA	9,087,607	63	Tulsa, OK	1,409,347
14	Miami, FL	8,980,826	64	Anchorage, AK	1,363,849
15	Honolulu, Oahu, HI	8,740,091	65	Tucson, AZ	1,209,173
16	Pittsburgh, PA	8,557,030	66	Jacksonville, FL	1,179,087
17	Orlando, FL	8,535,628	67	Norfolk, VA	1,116,618
18	Las Vegas, NV	8,435,624	68	Lihue, Kauai, HI	1,111,530
19	Seattle-Tacoma, WA	8,355,011	69	Omaha, NE	1,038,245
20	New York (John F. Kennedy), NY	8,347,648	70	Kailua-Kona, Hawaii, HI	1,021,356
21	Houston (Intercontinental), TX	8,308,479	71	Rochester, NY	1,018,125
22	Charlotte, NC	8,220,185	72	Little Rock, AR	995,424
23	Philadelphia, PA	6,827,030	73	Providence, RI	976,879
24	Washington (National), DC	6,825,376	74	Louisville, KY	963,178
25	Salt Lake City, UT	5,703,273	75	Birmingham, AL	958,539
26	San Diego, CA	5,631,471	76	Dayton, OH	933,753
27	Cincinnati, OH	4,903,127	77	Guam, Guam	927,190
28	Washington (Dulles Int'l), DC	4,464,895	78	Syracuse, NY	918,602
29	Nashville, TN	4,461,221	79	Richmond, VA	882,368
30	Tampa, FL	4,378,851	80	Spokane, WA	875,361
31	Raleigh/Durham, NC	4,376,097	81	Greensboro, NC	848,948
32	Houston (William P. Hobby), TX	4,001,769	82	Sarasota, FL	840,157
33	San Juan, PR	3,948,210	83	Albany, NY	786,060
34	Cleveland, OH	3,740,901	84	Hilo, HI	703,736
35	Baltimore, MD	3,614,491	85	Colorado Springs, CO	698,777
36	Portland, OR	3,500,423	86	Des Moines, IA	677,807
37	Kansas City, MO	3,482,243	87	Grand Rapids, MI	622,850
38	Ft. Lauderdale, FL	3,437,643	88	Charleston, SC	592,408
39	Memphis, TN	3,329,210	89	Boise, ID	589,620
40	New Orleans, LA	3,231,972	90	Wichita, KS	572,136
41	San Jose, CA	3,091,997	91	Lubbock, TX	563,333
42	Oakland, CA	3,009,394	92	Knoxville, TN	534,998
43	Ontario, CA	2,965,837	93	Madison, WI	524,474
44	Dallas (Love Field), TX	2,942,967	94	Harrisburg, PA	515,660
45	Indianapolis, IN	2,803,504	95	Midland, TX	506,780
46	San Antonio, TX	2,638,589	96	Brownsville, TX	500,470
47	Orange County, CA	2,637,841	97	Savannah, GA	480,296
48	Albuquerque, NM	2,506,884	98	Corpus Christi, TX	474,504
49	Sacramento, CA	2,485,878	99	Columbia, SC	452,350
50	West Palm Beach, FL	2,366,819	100	Charlotte Amalie, St. Thomas, VI	448,395

V. U.S. CIVIL AIR CARRIER FLEET

The U.S. air carrier fleet data shown in this chapter were developed from reports collected by the FAA field offices from the carriers detailing the number of aircraft by type and the associated used in air carrier service.

The aircraft reported in this chapter are all aircraft carrying passengers or cargo for compensation or hire under 14 CFR 121 (large aircarft–more than 30 seats) and 14 CFR 135 (small aircarft--30 seats or less). This definition is more encompassing than that used in Chapter 6. It is also different from the definition used in the FAA Aviation Forecast--jet aircraft of 60 seats or more, carrying passengers or cargo for compensation or hire.

TABLE 5.1
TOTAL AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS BY TYPE OF AIRCRAFT 1983–1992

Year	Total	Fixed-Wing					Total Rotary-Wing
		Total Fixed-Wing	Turbine			Piston	
			Total	Turbojet	Turboprop		
1983	4,203	4,194	3,640	2,768	872	554	9
1984	4,371	4,359	3,916	2,960	956	443	12
1985	4,678	4,673	4,240	3,164	1,076	433	5
1986	4,909	4,907	4,487	3,283	1,204	420	2
1987	5,250	5,237	4,816	3,575	1,241	421	13
1988	5,660	5,652	5,290	3,915	1,375	362	8
1989	5,778	5,771	5,418	3,942	1,476	353	7
1990	6,083	6,072	5,743	4,148	1,595	329	11
1991	6,054	6,048	5,765	4,167	1,598	283	6
1992[1]	7,320	7,187	6,340	4,446	1,894	847	133

Note: Air Carrier aircraft are aircraft carrying passengers or cargo for compensation or hire under 14 CFR 121 (large aircraft —more than 30 seats) and 14 CFR 135 (small aircraft —30 seats or less). This definition is more encompassing than that used in the **FAA Aviation Forecast** —jet aircraft, 60 seats or more, carrying passengers or cargo for compensation or hire.

Note: Beginning in 1987, the number of aircraft is the monthly average of the number of aircraft reported in use for the last three months of the year. Prior to 1987, it was the number of aircraft reported in use during December of the year.

Source: 1983 - 1991 *Air Carrier Aircraft Utilization and Propulsion Reliability Report*; Aviation Aviation Standards National Field Office, Federal Aviation Administration. 1992: Vital Information System

[1] Does not include 8,805 aircraft operated by the On-demand Air Taxis:

Jets: 720
Turboprops: 1,156
Piston: 5,457
Rotorcraft: 1,472

TABLE 5.2
AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL 1983–1992

Aircraft Make and Model	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
TOTAL	**7,320**	**6,054**	**6,063**	**5,778**	**5,660**	**5,250**	**4,909**	**4,678**	**4,370**	**4,201**
Turbojet-4-engine—Total	**389**	**410**	**432**	**428**	**427**	**382**	**322**	**322**	**349**	**309**
Boeing B707	20	27	25	27	31	31	35	27	22	24
Boeing B720	—	—	—	—	—	—	—	—	—	1
Boeing B747	178	184	190	180	171	156	150	151	156	146
British Aerospace Aircraft Group BA 146	23	17	44	53	57	57	25	29	14	3
Convair CV22	—	—	—	—	—	—	—	—	—	2
Douglas DC8	168	182	173	168	168	138	112	115	157	133
Turbojet-3-engine—Total	**1,381**	**1,376**	**1,438**	**1,459**	**1,542**	**1,469**	**1,466**	**1,468**	**1,438**	**1,393**
Boeing B727	1,029	1,073	1,152	1,167	1,246	1,168	1,172	1,195	1,161	1,122
Douglas DC10/MD-11	239	203	185	185	184	185	180	179	174	155
Lockheed L1011	113	100	101	107	112	116	114	114	103	116
Turbojet-2-engine—Total	**2,676**	**2,381**	**2,278**	**2,055**	**1,946**	**1,724**	**1,495**	**1,354**	**1,172**	**1,065**
Airbus A300	58	63	67	63	57	52	52	46	38	34
Airbus A310	21	42	21	19	19	13	7	4	—	—
Airbus A320	54	35	10	11	—	—	—	—	—	—
Boeing B737	915	835	812	756	706	633	555	476	391	348
Boeing B757	328	234	199	146	122	95	73	48	19	15
Boeing B767	170	136	120	111	126	83	69	59	53	49
British Aircraft BAC111	—	1	3	—	30	39	45	32	33	36
Cessna C500/C501	2	—	0	—	—	—	—	2	1	1
Cessna C550	—	—	7	5	—	—	—	—	—	—
Cessna C650	1	—	—	—	—	—	—	—	—	—
Dassault Falcon	—	2	—	—	—	—	—	—	—	—
Dassault MD10	—	—	—	—	—	—	—	—	2	—
Dassault MD20	—	—	—	—	—	—	—	2	9	12
Douglas DC9/MD-80	1002	953	967	888	837	760	643	641	594	557
Fokker F28	117	75	68	53	47	47	50	41	23	6
Grumman G1159	1	3	1	—	—	—	—	—	1	1
Hamberger Flugzeubam HFB320	—	—	—	—	—	—	—	—	—	1
Israel Aircaft 1121	1	—	—	—	—	—	—	—	—	—
Learjet LR25	3	2	1	2	1	—	—	—	—	—
Learjet LR35	3	—	2	1	1	2	1	3	8	4
Sud Aviation SE210	—	—	—	—	—	—	—	—	—	1
Turboprop-4-engine—Total	**107**	**75**	**88**	**96**	**95**	**102**	**96**	**108**	**109**	**99**
Canadair CL44	5	—	5	5	6	6	2	6	5	2
DeHavilland DHC7	40	33	40	41	39	41	40	42	46	46
Lockheed L188	44	24	24	30	30	34	33	38	34	37
Lockheed L382	18	18	19	20	20	21	21	22	22	11
Vickers V745	—	—	—	—	—	—	—	—	2	3
Turboprop-2-engine—Total	**1,787**	**1,523**	**1,507**	**1,380**	**1,280**	**1,139**	**1,108**	**965**	**847**	**777**
Beech BE65	16	—	—	—	1	4	1	—	—	—
Beech BE90	1	—	—	—	1	4	—	3	2	2
Beech BE99	39	32	54	53	84	52	95	103	85	101
Beech BE100	4	1	2	1	1	—	1	1	2	1
Beech BE200	11	8	16	10	7	5	2	1	6	4
Beech BE1900	231	167	147	109	80	48	60	42	17	—
Beech STC18	—	—	—	—	—	—	—	—	1	1

TABLE 5.2—Continued
AIRCRAFT REPORTED IN OPERATION
BY AIR CARRIERS, BY MANUFACTURER AND MODEL
1983–1992

Aircraft Make and Model	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
British Aerospace Aircraft Group Jetstream	240	214	222	165	135	113	69	46	10	10
British Aerospace BA ATP	10	10	4	—	—	—	—	—	—	—
Cessna C425	1	—	—	—	—	—	—	—	—	—
Cessna C441	2	2	2	4	3	2	3	1	3	1
Construcciones Aeronautics CA212	—	13	16	16	18	16	19	24	27	28
Concair CV580/CV640/CV600	19	37	33	58	72	77	91	100	107	100
DeHavilland DHC6	74	69	67	69	63	71	68	86	107	112
DeHavilland DHC8	115	81	74	64	44	34	26	10	—	—
Dornier DO228	13	31	32	34	33	18	12	6	—	—
Douglas DC3	—	—	—	—	—	—	—	1	—	—
Embraer EM110	16	23	48	59	77	97	91	79	81	83
Embrear EM120	195	167	156	105	62	36	16	0	0	0
Fairchild FH27	2	7	9	7	7	13	20	28	23	19
Fairchild FH227	3	3	4	11	8	7	8	9	9	
Fokker F27	51	40	46	42	33	26	36	27	14	7
Grumman G73	5	4	7	5	7	—	—	—	—	4
Grumman G159	1	2	7	6	5	14	15	23	21	16
Grumman G500	—	—	—	1	—	—	—	—	—	
Hawker-Siddeley HS748	—	—	—	—	—	—	—	2	5	
Mitsubishi MU2	10	1	1	—	—	1	6	3	1	2
Nihon YS11	31	22	21	21	22	36	36	42	30	35
Nord ND262	1	—	1	2	9	12	15	14	14	9
Piper 31T	99	8	8	12	9	6	5	4	8	6
Piper 42	1	1	—	—	—	—	—	—	—	—
Rockwell AC690	—	—	—	—	1	1	4	4	4	1
Saab-Fairchild SF340	195	153	109	85	68	51	34	17	3	—
Short SC7	6	2	2	—	—	—	1	1	1	1
Short SD3	88	93	103	118	110	110	110	77	78	66
S.N.I.A.S. ATR42	108	101	77	62	35	20	8	—	—	—
S.N.I.A.S. ATR72	14	—	—	—	—	—	—	—	—	—
Swearingen SA226	14	31	22	57	90	101	122	113	121	99
Swearingen SA227	174	200	218	212	191	163	135	101	70	55
Piston-4-engine—Total	**20**	**26**	**31**	**35**	**36**	**38**	**32**	**38**	**50**	**52**
DeHavilland DH114	—	—	—	—	—	—	—	—	6	11
Douglas DC4	—	—	—	—	—	—	1	3	3	3
Douglas DC6	19	25	30	34	35	37	30	34	41	38
Douglas DC7	1	1	1	1	1	1	1	1	—	—
Piston-3-engine—Total	**5**	**5**	**6**	**5**	**3**	**3**	**3**	**4**	**4**	**1**
Britten Norman MK3	5	5	6	5	3	3	3	4	4	1
Piston-2-engine—Total	**415**	**252**	**292**	**313**	**323**	**380**	**385**	**394**	**389**	**496**
Aero Commander AC500	—	—	—	—	—	—	—	—	—	2
Beech BE18	18	5	3	5	6	5	9	7	15	20
Beech BE36	5	—	—	1	3	—	—	—	—	—
Beech BE55	1	—	—	—	—	2	1	—	—	1
Beech BE58	14	4	4	6	15	7	4	9	9	6
Beech BE65	—	2	2	2	2	2	3	—	—	3
Beech BE76	—	—	—	—	—	—	2	3	3	1
Beech BE80	—	—	—	—	—	—	—	4	8	—
Beech BE95	3	1	1	1	3	—	—	—	—	—
Beech BE99	—	—	—	—	—	—	—	—	—	1
Britten Norman BN2A	18	14	15	16	30	29	29	7	27	29
Cessna C207T	—	—	—	—	—	—	—	—	—	1
Cessna C210	6	—	—	—	—	—	—	—	—	—
Cessna C303T	—	—	—	—	1	1	1	1	—	—
Cessna C310	5	2	2	2	—	1	1	1	2	3
Cessna C320	1	—	—	—	—	—	—	—	1	—
Cessna C401	1	1	1	1	4	—	—	—	—	—
Cessna C402	126	91	110	98	101	143	147	155	112	152
Cessna C404	3	1	1	1	4	4	6	5	4	8

TABLE 5.2—Continued
AIRCRAFT REPORTED IN OPERATION
BY AIR CARRIERS, BY MANUFACTURER AND MODEL
1983–1992

Aircraft Make and Model	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
Cessna C411	—	—	—	—	—	—	—	—	1	—
Cessna C414	1	1	1	—	—	—	2	1	1	1
Cessna C421	2	—	—	—	1	—	—	—	1	—
Convair CV240	19	13	11	9	9	10	9	12	15	10
Convair CV340/CV440	30	24	25	26	21	23	17	18	14	22
Curtiss-Wright C46	—	—	—	—	—	—	—	3	2	4
Douglas DC3	21	12	15	19	20	38	43	39	30	42
Fairchild C82	—	—	—	—	—	—	—	—	—	2
Grumman G21	7	—	—	—	—	—	—	3	4	3
Grumman G44	4	—	—	—	1	1	1	1	1	1
Grumman G73	—	—	2	3	4	12	11	3	5	5
Grumman G111	—	—	—	—	—	2	3	6	—	4
Martin M404	—	—	—	2	2	1	—	—	1	13
Pantanivia PT68	—	—	—	—	—	2	—	—	—	—
Piper P23	16	8	9	9	9	11	9	3	10	16
Piper P28	18	—	—	—	—	—	—	—	—	7
Piper P30	—	—	—	—	—	—	—	—	1	2
Piper P31	—	66	81	100	71	77	73	100	110	121
Piper P32	78	4	2	2	2	2	—	—	—	—
Piper P34	16	3	7	9	12	4	9	12	11	17
Piper P44	1	—	—	—	1	1	1	1	1	1
Piper PA600	1	—	—	1	1	2	2	—	—	—
Piper PA1020T	—	—	—	—	—	—	2	—	—	—
Piston-1-engine—Total	***407***	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Helicopter—Total	**133**	**6**	**11**	**7**	**8**	**13**	**2**	**5**	**12**	**9**

Note: Air Carrier aircraft are aircraft carrying passengers or cargo for compensation or hire under 14 CFR 121 (large aircraft —more than 30 seats) and 14 CFR 135 (small aircraft —30 seats or less). This definition is more encompassing than that used in the **FAA Aviation Forecast** —jet aircraft, 60 seats or more, carrying passengers or cargo for compensation or hire.

NA-Not availalbe for prior years.

Note: Beginning in 1987, the number of aircraft is the monthly average of the number of aircraft reported in use for the last three months of the year. Prior to 1987, it was the number of aircraft reported in use during December of the year.

Source: 1983 - 1991 Air Carrier Aircraft Utilization and Propulsion Reliability Report; Aviation Aviation Standards National Field Office, Federal Aviation Administration. 1992: Vital Information System

[1] Does not include 8,805 aircraft operated by the On-demand Air Taxis:

Jets: 720
Turboprops: 1,156
Piston: 5,457
Rotorcraft: 1,472

TABLE 5.3
TOTAL FLIGHT HOURS FOR AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL 1983–1992

Aircraft Make and Model	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
TOTAL	**13,839,486**	**13,483,182**	**13,500,128**	**12,687,084**	**12,284,089**	**11,886,689**	**11,221,578**	**10,498,546**	**9,674,406**	**8,555,538**
Turbojet-4-engine—Total	**886,306**	**969,133**	**1,139,210**	**1,120,917**	**1,093,392**	**997,951**	**921,409**	**817,058**	**861,389**	**816,624**
Boeing B707	25,239	34,125	39,522	40,046	43,946	36,206	37,448	15,904	39,243	64,819
Boeing B720	—	—	—	—	—	—	—	—	136	438
Boeing B747	584,095	630,850	680,668	643,231	620,327	575,426	559,137	537,954	537,142	504,573
British Aerospace Aircraft Group BAE146	43,261	49,806	94,574	121,415	128,339	125,918	92,431	52,452	14,140	1,623
Douglas DC8	233,711	284,352	324,446	316,225	300,780	260,401	232,393	210,748	270,728	245,171
Turbojet-3-engine—Total	**3,006,453**	**3,125,859**	**3,459,434**	**3,533,071**	**3,705,084**	**3,866,525**	**3,960,406**	**3,843,367**	**3,786,832**	**3,278,501**
Boeing B727	1,984,035	2,208,622	2,528,818	2,606,796	2,780,240	2,930,107	3,036,233	2,989,848	2,990,821	2,529,074
Douglas DC10/MD11	700,964	613,916	587,954	589,989	583,558	566,751	580,200	529,073	487,831	423,824
Lockheed L1011	320,454	303,321	342,662	336,286	341,286	368,667	343,973	324,436	308,180	325,603
Turbojet-2-engine—Total	**6,735,753**	**6,286,850**	**5,999,153**	**5,295,578**	**4,951,466**	**4,575,179**	**4,057,267**	**3,568,486**	**2,872,265**	**2,494,072**
Airbus A300	152,677	166,833	177,996	158,716	150,603	156,947	150,898	131,904	101,143	84,674
Airbus A310	84,523	79,073	80,040	76,537	61,663	27,234	17,054	5,613	—	—
Airbus A320	161,745	81,881	27,290	8,523	—	—	—	—	—	—
Boeing B737	2,365,822	2,318,936	2,253,106	2,039,117	1,859,347	1,730,473	1,489,831	1,312,425	1,006,238	829,359
Boeing B757	879,069	666,430	549,289	359,955	321,369	270,729	195,957	108,320	50,022	17,090
Boeing B767	526,801	499,962	429958	412,183	367,591	274,429	223,227	192,467	172,705	104,222
British Aircraft BAC111	236	159	630	27,611	65,095	84,642	68,908	73,873	59,555	79,011
Cessna C500/C501	—	—	—	—	—	54	50	546	657	652
Cessna C550	—	—	10,073	3,237	—	—	—	—	—	—
Dassault Falcon	—	278	—	—	—	—	—	—	—	—
Dassault MD10	53	—	—	—	—	—	—	2,262	698	—
Dassault MD20	2,002	—	—	—	—	—	—	4,336	3,218	11,097
Douglas DC9/MD88	2,365,520	2,317,321	2,323,334	2,106,800	2,035,672	1,931,391	1,809,688	1,655,353	1,438,339	1,348,511
Fokker F28	196,582	155,122	145,547	101,421	88,682	97,727	98,918	73,494	33,036	13,224
Grumman G1159	270	413	60	—	47	—	—	334	660	309
Hamberger Flugzeubam HFB320	—	—	—	—	—	—	—	—	102	734
Israel Aircraft 1121	—	—	—	—	—	—	—	—	—	8
Learjet LR23	—	—	—	—	—	—	—	—	—	1,227
Learjet LR24	—	—	—	—	—	—	—	—	—	537
Learjet LR25	453	291	384	482	44	—	—	—	—	—
Learjet LR35	—	151	1,446	996	1,353	1,553	2,536	7,559	5,892	3,148
Rockwell International NA265	—	—	—	—	—	—	—	—	—	49
Sud Aviation SE210	—	—	—	—	—	—	—	—	—	220
Turboprop-4-engine—Total	**106,657**	**138,463**	**164,771**	**175,469**	**154,747**	**161,424**	**169,864**	**209,197**	**216,405**	**206,435**
Canadair CL44	1,409	1,892	5,896	6,527	8,427	9,355	8,687	9,147	7,567	6,066
DeHavilland DHC7	54,362	58,579	76,007	86,434	76,027	91,899	73,524	98,315	106,267	103,528
Lockheed L188	15,230	28,543	32,286	31,457	23,691	33,618	38,019	44,765	45,182	47,981
Lockheed L382	35,656	49,449	50,582	51,051	46,602	46,552	49,654	56,597	56,165	47,877
Vickers V745	—	—	—	—	—	—	—	373	1,204	983
Turboprop-2-engine—Total	**2,961,344**	**2,734,707**	**2,508,271**	**2,335,386**	**2,118,066**	**1,943,532**	**1,720,179**	**1,616,425**	**1,487,032**	**1,288,616**
Beech BE65	—	—	—	—	—	596	639	—	—	—
Beech BE90	—	—	—	40	374	303	158	360	443	626
Beech BE99	26,827	60,176	51,481	86,255	125,247	141,691	175,543	199,736	199,205	183,5[illegible]
Beech BE100	627	787	828	934	769	803	259	806	202	[illegible]3
Beech BE200	12,196	12,751	31,140	15,134	9,679	3,625	970	3,541	2,522	1,86[illegible]
Beech BE1900	397,510	323,440	238,129	196,469	153,473	135,960	107,128	73,211	23,289	—
Beech STC18	—	—	—	—	—	—	982	—	648	632
British Aerospace Aircraft Group Jetstream	434,103	391,062	307,585	274,357	252,253	188,315	108,723	60,492	27,712	18,485
British Aerospace BA ATP	17,156	13,762	3,778	—	—	—	—	—	—	—

TABLE 5.3—Continued
TOTAL FLIGHT HOURS FOR AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL 1983–1992

Aircraft Make and Model	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
Cessna C441	1,200	1,588	2,782	3,713	4,948	3,874	1,364	1,745	1,672	1,265
Construcciones Aeronautics CA212	10,390	16,240	22,574	21,710	23,610	21,643	19,891	24,886	34,252	33,902
Concair CV580/CV640/ CV600	20,125	21,709	23,534	38,641	63,141	82,371	100,288	113,063	121,399	121,785
DeHavilland DHC6	88,275	95,433	103,670	107,403	113,810	122,783	113,958	162,340	176,233	169,980
DeHavilland DHC8	242,447	174,306	160,925	127,911	80,964	55,680	36,835	7,362	—	—
Dornier DO228	27,448	59,906	72,680	57,357	56,580	26,032	16,044	12,306	—	—
Douglas DC3	34	—	—	—	531	—	—	1,478	—	—
Embraer EM110	32,270	47,802	85,513	124,773	148,880	177,781	149,585	156,363	199,536	196,128
Embraer EM120	452,114	383,804	310,440	211,897	114,296	66,054	18,838	—	—	—
Fairchild FH27	3,315	2,187	4,605	4,709	9,821	13,502	31,232	36,440	35,521	24,777
Fiarchild FH227	269	1,030	1,509	4,209	12,169	11,787	13,244	14,491	17,053	19,525
Fokker F27	49,413	61,698	65,309	60,371	50,645	59,910	61,144	40,521	25,056	13,151
GAF Nomad N22	1,236	—	—	—	—	—	—	—	—	69
Grumman G73	2,311	2,562	1,968	6,328	10,036	—	—	—	—	—
Grumman G159	288	1,499	9,348	9,669	7,139	15,177	23,328	23,911	20,773	18,339
Grumman G500	—	—	—	88	93	—	—	—	—	—
Hawker-Siddeley HS748	—	—	—	—	—	—	—	2,500	7,385	9,320
Isreal Aircraft AR101B	—	—	—	—	—	—	—	—	—	587
Mitsubishi MU2	217	222	142	—	88	256	2,980	1,390	314	14
Nihon YS11	11,868	14,071	14,254	16,003	17,645	38,093	46,268	53,707	48,246	43,260
Nomad N24	—	1,160	—	—	1,907	—	—	—	—	—
Nord ND262	—	100	487	898	11,132	23,313	24,860	20,604	20,820	22,446
Piper 31T	53,249	8,256	9,024	11,410	8,232	5,656	4,865	7,003	10,103	2,692
Rockwell AC690	—	—	—	—	4	476	3,057	3,076	2,683	22
Saab-Fairchild SF340	395,691	287,144	197,149	171,936	152,177	98,616	56,392	20,627	386	—
Short SC7	1,221	1,454	964	112	—	—	101	315	475	733
Short SD3	138,658	167,255	203,871	192,509	183,422	217,177	184,680	178,862	150,714	123,385
S.N.I.A.S. ATR42	180,742	174,754	142,741	120,074	60,029	27,943	5,923	—	—	—
S.N.I.A.S. ATR72	21,681	—	—	—	—	—	—	—	—	—
Swearingen SA226	18,837	33,583	52,104	97,484	144,032	163,994	185,243	217,667	218,716	194,324
Swearingen SA227	339,626	374,966	389,737	372,992	300,940	240,121	225,657	177,622	141,674	87,754
Piston-4-engine—Total	**15,780**	**21,044**	**22,919**	**24,536**	**25,063**	**24,367**	**24,909**	**30,864**	**29,215**	**33,616**
DeHavilland DH114	—	—	—	—	—	—	—	2,626	7,847	16,835
Douglas DC4	419	—	266	—	—	—	1,038	1,512	720	1,187
Douglas DC6	15,072	20,465	21,979	23,418	24,055	23,405	23,049	26,039	20,648	15,594
Douglas DC7	289	579	674	1,120	1,028	962	822	677	—	—
Piston-3-engine—Total	**2,665**	**3,786**	**4,664**	**3,229**	**2,831**	**2,477**	**1,716**	**5,470**	**2,983**	**1,191**
Britten Norman MK3	2,665	3,786	4,664	3,229	2,831	2,477	1,716	5,470	2,983	1,191
Piston-2-engine—Total	**101,145**	**168,388**	**193,648**	**194,168**	**229,150**	**291,397**	**360,823**	**402,377**	**410,297**	**427,446**
Aero Cammander AC500	—	—	—	—	13	—	6	28	300	878
Aero Cammander AC600	—	—	—	—	70	—	—	—	—	581
Beech BE18	1,984	1,658	1,218	1,157	466	578	345	3,015	9,723	10,721
Beech A36TC	—	—	—	1,083	1,040	659	—	—	—	—
Beech BE55	295	—	—	—	—	—	194	—	284	674
Beech BE58	117	3,665	1,823	2,285	2,498	2,165	1,727	4,262	2,637	1,430
Beech BE65	—	1,042	2,408	2,355	3,940	2,181	5,252	—	—	3,385
Beech BE76	—	—	—	—	—	28	142	525	586	306
Beech BE80	772	—	—	—	—	—	—	7,031	7,667	—
Beech BE95	99	341	442	435	899	635	—	—	—	—
Beech BE99	—	—	—	—	—	—	—	—	—	3,719
Britten Norman BN2A	11,213	10,288	11,379	15,033	18,129	19,729	26,166	22,774	28,306	31,204
Cessna C207T	—	—	—	639	—	—	—	—	—	218
Cessna C210T	—	—	—	—	—	—	—	—	45	244
Cessna C303T	—	—	—	—	67	6	—	237	207	—
Cessna C310	1,080	376	1,135	573	—	440	490	372	956	1,059

TABLE 5.3—Continued
TOTAL FLIGHT HOURS FOR AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL 1983–1992

Aircraft Make and Model	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
Cessna C320	—	—	—	—	—	—	—	8	20	—
Cessna C340	1,028	—	—	—	134	—	—	—	6	—
Cessna C401	—	770	1,032	1,632	376	—	—	—	—	788
Cessna C402	75,030	74,396	86,705	86,012	104,933	139,843	184,470	191,070	166,914	152,596
Cessna C404	—	462	468	837	2,321	4,022	4,959	4,562	6,730	9,694
Cessna C411	—	—	—	—	—	—	—	102	135	—
Cessna C414	104	133	50	—	11	189	1,279	523	522	2,267
Cessna C421	—	—	—	26	89	—	—	46	26	32
Convair CV240	1,354	3,618	2,950	3,045	3,694	2,967	3,106	6,284	7,861	6,609
Convair CV340/CV440	2,468	6,316	6,189	6,820	6,229	6,384	5,584	4,664	6,910	15,932
Curtiss-Wright C46	—	—	—	—	—	—	411	1,104	966	1,821
Douglas DC3	2,075	3,702	5,279	7,389	14,680	21,485	25,971	25,916	23,498	21,836
Fairchild C82	—	—	—	—	—	—	—	6	706	1,252
Grumman G21	—	—	—	—	—	—	787	1,861	1,927	1,453
Grumman G44	—	—	—	—	—	—	56	110	151	96
Grumman G73	151	—	93	1,191	1,687	11,178	10,411	7,979	7,669	7,692
Grumman G111	—	—	—	—	—	1,712	3,476	3,207	4,298	1,817
Martin M404	—	—	—	—	127	10	—	217	5,094	5,732
Partenivia PT68	—	—	—	—	13	1,362	—	—	—	—
Piper P23	2,230	2,495	3,217	3,419	4,024	5,100	4,113	6,308	4,691	6,658
Piper P30	—	—	—	—	—	—	—	17	460	721
Piper P31	—	56,405	66,000	56,781	61,016	67,554	72,782	102,855	114,330	128,305
Piper P32	761	933	350	530	768	698	—	—	—	—
Piper P34	384	1,702	2,865	2,895	1,266	981	7,352	7,255	6,660	7,298
Piper P44	—	86	—	20	354	524	418	39	—	259
Piper PA600	—	—	43	11	106	409	321	—	—	169
Piper PA1020T	—	—	—	—	—	558	1,005	—	—	—
Piston-1-engine—Total	927	NA	NA	NA	NA	NA	NA	NA	NA	NA
Helicopter—Total	3,466	4,962	8,060	4,728	4,270	3,847	4,966	5,322	7,868	9,037

Note: Air Carrier aircraft are aircraft carrying passengers or cargo for compensation or hire under 14 CFR 121 (large aircraft —more than 30 seats) and 14 CFR 135 (small aircraft —30 seats or less). This definition is more encompassing than that used in the FAA Aviation Forecast —jet aircraft, 60 seats or more, carrying passengers or cargo for compensation or hire.

TABLE 5.4
TOTAL LARGE AIRCRAFT REPORTED IN OPERATION BY DOMESTIC, FLAG AND SUPPLEMENTAL/SCHEDULED CARGO AIR CARRIERS AND COMMERCIAL OPERATORS BY CARRIER, AND BY ENGINE TYPE
1992

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston					Rotary
		Total	4–eng.	3–eng.	2–eng.	Total	4–eng.	2–eng.	Total	4–eng.	3–eng.	2–eng.	1–eng.	Wing
Total	**6,037**	**4,439**	**389**	**1,381**	**2,669**	**1,257**	**107**	**1,150**	**255**	**20**	**—**	**187**	**48**	**86**
Aerial Transit Co dba Translados	2	—	—	—	—	—	—	—	2	2	—	—	—	—
Air Transport Internat	9	9	9	—	—	—	—	—	—	—	—	—	—	—
Air Wisconsin Inc dba United Express	39	12	12	—	—	27	—	27	—	—	—	—	—	—
Airborne Express Inc	81	70	23	—	47	11	—	11	—	—	—	—	—	—
Airmark Aviation dba Transtar	4	4	—	—	4	—	—	—	—	—	—	—	—	—
Alaska Airlines	71	71	—	24	47	—	—	—	—	—	—	—	—	—
Aloha Airlines Inc dba Princeville	21	21	—	—	21	—	—	—	—	—	—	—	—	—
America West Airl.	88	86	—	—	86	2	—	2	—	—	—	—	—	—
American Airlines	682	682	—	217	465	—	—	—	—	—	—	—	—	—
American Internat. Air dba Connie Kalitta FS	28	28	23	3	2	—	—	—	—	—	—	—	—	—
American Trans Air	32	32	—	27	5	—	—	—	—	—	—	—	—	—
Amerijet Intern Inc	9	9	—	9	—	—	—	—	—	—	—	—	—	—
Arrow Air Inc	9	9	7	2	—	—	—	—	—	—	—	—	—	—
Atlantic Coast Airlines dba United Express	39	—	—	—	—	39	—	39	—	—	—	—	—	—
Atlantic Southeast	66	—	—	—	—	66	2	64	—	—	—	—	—	—
Atlas Air Inc	2	2	2	—	—	—	—	—	—	—	—	—	—	—
Basler Flight Servic	6	—	—	—	—	—	—	—	6	—	—	6	—	—
Britt Airways dba Continental Express	95	—	—	—	—	95	5	90	—	—	—	—	—	—
Buffalo Airways	11	11	11	—	—	—	—	—	—	—	—	—	—	—
Business Express Pilgrim Airlines	70	5	5	—	—	65	—	65	—	—	—	—	—	—
Capitol Air Express	1	1	—	1	—	—	—	—	—	—	—	—	—	—
Carnival Airlines	17	17	—	7	10	—	—	—	—	—	—	—	—	—
Ccair Inc dba USAir Express	23	—	—	—	—	23	—	23	—	—	—	—	—	—
Challenge Air Cargo	4	4	1	—	3	—	—	—	—	—	—	—	—	—
Comair Inc	69	—	—	—	—	69	—	69	—	—	—	—	—	—
Condor Aviation	1	—	—	—	—	—	—	—	1	—	—	1	—	—
Continental	338	338	8	118	212	—	—	—	—	—	—	—	—	—
Continental Air Transport dba Omni Air Express	2	2	—	1	1	—	—	—	—	—	—	—	—	—
Continental Micronesia	2	2	—	2	—	—	—	—	—	—	—	—	—	—
Crown Airways dba USAir Express	10	—	—	—	—	10	—	10	—	—	—	—	—	—
Delta Airlines	556	556	—	217	339	—	—	—	—	—	—	—	—	—
DHL Airways	28	17	—	17	—	10	—	10	—	—	—	—	—	1
Eastern Airlines	5	5	—	—	5	—	—	—	—	—	—	—	—	—
Dash Air	3	—	—	—	—	3	3	—	—	—	—	—	—	—
Was Air Train	29	29	29	—	—	—	—	—	—	—	—	—	—	—
Empire Airways	47	2	2	—	—	11	—	11	34	—	—	34	—	—
ERA Aviation	117	2	—	—	2	13	—	13	17	—	—	17	—	85
Evergreen Intern Air	32	32	16	8	8	—	—	—	—	—	—	—	—	—
Executive Airlines dba American Eagle	14	—	—	—	—	14	—	14	—	—	—	—	—	—
Executive Flight Management dba Trans American Charter	6	1	—	—	1	5	—	5	—	—	—	—	—	—
Express One Internat	24	24	—	20	4	—	—	—	—	—	—	—	—	—
Fairways Corp	4	1	—	—	1	3	—	3	—	—	—	—	—	—
Federal Express Corp	188	188	8	180	—	—	—	—	—	—	—	—	—	—

TABLE 5.4—Continued
TOTAL LARGE AIRCRAFT REPORTED IN OPERATION BY DOMESTIC, FLAG AND SUPPLEMENTAL/SCHEDULED CARGO AIR CARRIERS AND COMMERCIAL OPERATORS BY CARRIER, AND BY ENGINE TYPE
1992

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston					Rotary
		Total	4–eng.	3–eng.	2–eng	Total	4–eng.	2–eng.	Total	4–eng.	3–eng.	2–eng.	1–eng.	Wing
Fine Airlines	5	5	5	—	—	—	—	—	—	—	—	—	—	—
Flagship Airlines dba American Eagle	136	—	—	—	—	136	—	136	—	—	—	—	—	—
Flight Trails dba Air Resorts Airlines	7	—	—	—	—	7	—	7	—	—	—	—	—	—
Florida West Airl	4	4	4	—	—	—	—	—	—	—	—	—	—	—
H C L Aviation Inc dba Av Atlantic	4	4	—	4	—	—	—	—	—	—	—	—	—	—
Hawaiian Airlines	29	25	6	5	14	4	4	—	—	—	—	—	—	—
Henson Aviation Inc dba USAir Express	38	—	—	—	—	38	—	38	—	—	—	—	—	—
Horizon Industries	57	3	—	—	3	54	—	54	—	—	—	—	—	—
Internatl Cargo Xpress	2	2	2	—	—	—	—	—	—	—	—	—	—	—
K and K Aircraft Inc	4	—	—	—	—	—	—	—	4	—	—	4	—	—
Key Airlines	12	12	—	1	11	—	—	—	—	—	—	—	—	—
Kitty Hawk Aircargo	15	5	—	—	5	1	—	1	9	—	—	9	—	—
M W Mcdonald Inc dba Miami Air Charter	5	—	—	—	—	—	—	—	5	—	—	5	—	—
Markair Express	103	—	—	—	—	38	11	27	65	—	—	25	40	—
Markair Inc	25	25	—	—	25	—	—	—	—	—	—	—	—	—
Mesaba Aviation	49	—	—	—	—	49	—	49	—	—	—	—	—	—
Mgm Grand Air Inc	6	6	3	3	—	—	—	—	—	—	—	—	—	—
Miami Air International	14	14	—	14	—	—	—	—	—	—	—	—	—	—
Mid Pacific Air Corp	9	1	1	—	—	8	—	8	—	—	—	—	—	—
Midway Airlines	31	31	—	—	31	—	—	—	—	—	—	—	—	—
Midwest Express Airl	14	14	—	—	14	—	—	—	—	—	—	—	—	—
Million Air Inc	2	2	2	—	—	—	—	—	—	—	—	—	—	—
Morris Air Corporation	5	5	—	—	5	—	—	—	—	—	—	—	—	—
Mountain Air Cargo	63	—	—	—	—	27	—	27	36	—	—	36	—	—
North American Airl	2	2	—	—	2	—	—	—	0	—	—	—	—	—
Northeast Exps Regn	28	—	—	—	—	28	—	28	0	—	—	—	—	—
Northern Air Cargo	14	—	—	—	—	—	—	—	14	14	—	—	—	—
Northwest Airlines	371	371	50	100	221	—	—	—	—	—	—	—	—	—
Paradise Island Airl	6	—	—	—	—	6	6	—	—	—	—	—	—	—
Patriot Airlines	2	2	—	2	—	—	—	—	—	—	—	—	—	—
Pennsylvania Commut. dba USAir Express	55	—	—	—	—	55	—	55	—	—	—	—	—	—
Private Jet Expeditions	9	9	—	—	9	—	—	—	—	—	—	—	—	—
Reeve Aleutian Air	46	12	—	12	—	34	22	12	—	—	—	—	—	—
Renown Aviation Inc	12	—	—	—	—	4	1	3	8	—	—	8	—	—
Rhoades Aviation	17	—	—	—	—	—	—	—	17	—	—	17	—	—
Rich Intern. Airways	7	7	4	3	—	—	—	—	—	—	—	—	—	—
Ross Aviation Inc	3	—	—	—	—	3	1	2	—	—	—	—	—	—
Ryan International dba PHH Air	32	32	—	24	8	—	—	—	—	—	—	—	—	—
Salair Inc	7	—	—	—	—	2	—	2	5	—	—	5	—	—
Sierra Pacific Airlines	16	12	—	—	12	2	—	2	2	—	—	2	—	—
Simmons Airlines dba American Eagle	86	—	—	—	—	86	—	86	—	—	—	—	—	—
Southern Air Trans	25	7	7	—	—	18	18	—	—	—	—	—	—	—
Southwest Airlines	144	144	—	—	144	—	—	—	—	—	—	—	—	—
Sun Country Airlines	10	10	—	10	—	—	—	—	—	—	—	—	—	—
Tem Enterprises dba Casino Express	2	2	—	—	2	—	—	—	—	—	—	—	—	—

TABLE 5.4—Continued
TOTAL LARGE AIRCRAFT REPORTED IN OPERATION BY DOMESTIC, FLAG AND SUPPLEMENTAL/SCHEDULED CARGO AIR CARRIERS AND COMMERCIAL OPERATORS BY CARRIER, AND BY ENGINE TYPE
1992

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston					Rotary Wing
		Total	4–eng.	3–eng.	2–eng.	Total	4–eng.	2–eng.	Total	4–eng.	3–eng.	2–eng.	1–eng.	
Tower Air	12	12	12	—	—	—	—	—	—	—	—	—		
Trans Air Link Corp	4	—	—	—	—	—	—	—	4	4	—	—	—	—
Trans Florida Airl	4	—	—	—	—	—	—	—	4	—	—	4	—	—
Trans States Airline	43	—	—	—	—	43	—	43	—	—	—	—	—	—
Trans World Airlines	196	196	14	94	88	—	—	—	—	—	—	—	—	—
Trans World Express dba TWA Express	27	—	—	—	—	27	8	19	—	—	—	—	—	—
Trump Shuttle dba USAir Shuttle	0	0	—	—	—	—	—	—	—	—	—	—	—	—
Ultrair Inc dba Airline Of The Americas	6	6	—	6	—	—	—	—	—	—	—	—	—	—
United Airlines	542	542	55	153	334	—	—	—	—	—	—	—	—	—
United Parcel Service	149	149	63	56	30	—	—	—	—	—	—	—	—	—
USAir Inc	442	442	—	8	434	—	—	—	—	—	—	—	—	—
Viking Intern Airl	4	1	—	—	1	1	—	1	2	—	—	2	—	—
Viscount Air Service	10	10	—	—	10	—	—	—	—	—	—	—	—	—
Westair Commuter dba United Express	52	3	3	—	—	49	—	49	—	—	—	—	—	—
Westates Airlines	5	—	—	—	—	2	—	2	3	—	—	3	—	—
Wings West Airlines dba American Eagle	42	—	—	—	—	42	—	42	—	—	—	—	—	—
World Airways	13	13	—	13	—	—	—	—	—	—	—	—	—	—
Worldwide Airline Service dba Leisure Air	3	3	—	—	3	—	—	—	—	—	—	—	—	—
Wrangler Aviation dba Blue Bell	6	1	—	1	—	5	5	—	—	—	—	—	—	—
Zantop Intern Airl	33	2	2	—	—	22	21	1	9	—	—	9	—	—

Note: Air Carrier aircraft are aircraft carrying passengers or cargo for compensation or hire under 14 CFR 121 (large aircraft —more than 30 seats) and 14 CFR 135 (small aircraft —30 seats or less). This definition is more encompassing than that used in the **FAA Aviation Forecast** —jet aircraft, 60 seats or more, carrying passengers or cargo for compensation or hire.

Source: Vital Information System

TABLE 5.5
TOTAL SMALL AIRCRAFT REPOTED IN OPERATION BY COMMUTER AIR CARRIERS AND ON—DEMAND AIR TAXIS BY CARRIER, AND BY ENGINE TYPE
1992

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston					Rotary Wing
		Total	4–eng.	3–eng.	2–eng.	Total	4–eng.	2–eng.	Total	4–eng.	3–eng.	2–eng.	1–eng.	
Total	**1,283**	**7**	—	—	**7**	**637**	—	**637**	**592**	—	**5**	**228**	**359**	**47**
40 Mile Air Ltd	8	—	—	—	—	—	—	—	3	—	—	—	3	5
Air Alpha Inc	2	—	—	—	—	2	—	2	—	—	—	—	—	—
Air Cape dba Nantucket Airlines	5	—	—	—	—	—	—	—	5	—	—	5	—	—
Air LA Inc	2	—	—	—	—	2	—	2	—	—	—	—	—	—
Air Midwest Inc dba USAir Express	14	—	—	—	—	14	—	14	—	—	—	—	—	—
Air Molokai Inc	3	—	—	—	—	—	—	—	3	—	—	3	—	—
Air Nevada Airlines	12	—	—	—	—	—	—	—	12	—	—	9	3	—
Air Sunshine Inc	5	—	—	—	—	—	—	—	5	—	—	5	—	—
Air Vegas Inc	25	—	—	—	—	2	—	2	23	—	—	19	4	—
Air Wise Aviation	9	—	—	—	—	1	—	1	8	—	—	3	5	—
Airvantage	6	—	—	—	—	6	—	6	—	—	—	—	—	—
Airways Intern. Inc	31	—	—	—	—	2	—	2	29	—	—	29	—	—
Alaska island Air	6	—	—	—	—	—	—	—	6	—	—	1	5	—
Alaska Juneau Aero. dba Wings of Alaska	21	—	—	—	—	—	—	—	21	—	—	—	21	—
Alliance Air Inc	2	—	—	—	—	2	—	2	—	—	—	—	—	—
Aloha island Air dba Princevillle Airways	8	—	—	—	—	8	—	8	—	—	—	—	—	—
Alpha Aviation Inc	3	—	—	—	—	3	—	3	—	—	—	—	—	—
Alpine Aviation Inc	17	—	—	—	—	12	—	12	5	—	—	1	4	—
Arctic Circle Air	13	—	—	—	—	3	—	3	10	—	—	1	9	—
Arizona Flight Sch. dba Arizona Pacific Airways	8	—	—	—	—	3	—	3	5	—	—	2	3	—
Aviation Associates	12	—	—	—	—	12	—	12	—	—	—	—	—	—
Aviation Services dba Freedom Air	9	—	—	—	—	1	—	1	8	—	—	2	6	—
Aviation Services West dba Lake Powell Air Service	39	—	—	—	—	8	—	8	31	—	—	—	31	—
Baker Aviation Inc	10	—	—	—	—	2	—	2	8	—	—	2	6	—
Bankair Inc	22	3	—	—	3	9	—	9	10	—	—	9	1	—
Barrow Air Inc	2	—	—	—	—	—	—	—	2	—	—	—	2	—
Beaver Aviation Serv	6	—	—	—	—	2	—	2	4	—	—	3	1	—
Bellair	2	—	—	—	—	—	—	—	2	—	—	—	2	—
Bemidji Aviation Ser	22	—	—	—	—	12	—	12	10	—	—	6	4	—
Bering Air Inc	16	—	—	—	—	7	—	7	9	—	—	4	5	—
Bidzy Ta Hot Aana Co dba Tanana Air Service	7	—	—	—	—	2	—	2	5	—	—	—	5	—
Big Sky Transport dba Northwest Airlink	6	—	—	—	—	4	—	4	2	—	—	2	—	—
Cape Smythe Air Serv	19	—	—	—	—	10	—	10	9	—	—	—	9	—
Champlain Enterprise dba Commutair/USAir Express	31	1	—	—	1	30	—	30	—	—	—	—	—	—
Charles J Colgan	4	—	—	—	—	4	—	4	—	—	—	—	—	—
Chautauqua Airlines dba USAir Express	16	—	—	—	—	16	—	16	—	—	—	—	—	—
Chester County Aviat	9	—	—	—	—	6	—	6	3	—	—	1	2	—
Chicago Air Taxi Inc dba Helicopter Shuttle	2	—	—	—	—	—	—	—	—	—	—	—	—	2
Christman Air System	1	—	—	—	—	1	—	1	—	—	—	—	—	—
Coastal Air Trans.	1	—	—	—	—	—	—	—	1	—	—	1	—	—
Columbia Pacific Air	1	—	—	—	—	—	—	—	1	—	—	1	—	—
Conquest Airlines	7	—	—	—	—	6	—	6	1	—	—	1	—	—
Direct Air Inc	5	—	—	—	—	5	—	5	—	—	—	—	—	—

TABLE 5.5—Continued
TOTAL SMALL AIRCRAFT REPOTED IN OPERATION BY COMMUTER AIR CARRIERS AND ON—DEMAND AIR TAXIS BY CARRIER, AND BY ENGINE TYPE
1992

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston					Rotary Wing
		Total	4–eng.	3–eng.	2–eng.	Total	4–eng.	2–eng.	Total	4–eng.	3–eng.	2–eng.	1–eng.	
Exec Express II Inc	8	—	—	—	—	8	—	8	—	—	—	—	—	—
Express Airlines dba Northwest Airlink	62	—	—	—	—	62	—	62	—	—	—	—	—	—
Flamenco Airways Inc	12	—	—	—	—	—	—	—	12	—	1	10	1	—
Florida Air Inc	1	—	—	—	—	1	—	1	—	—	—	—	—	—
Flying Boat Inc dba Chalk's Int'l Air	5	—	—	—	—	5	—	5	—	—	—	—	—	—
Frontier Service Inc	10	—	—	—	—	8	—	8	2	—	—	1	1	—
GP Express Airlines	13	—	—	—	—	12	—	12	1	—	—	1	—	—
Grand Airways dba National Air	7	—	—	—	—	7	—	7	—	—	—	—	—	—
Grand Canyon Airline	5	—	—	—	—	5	—	5	—	—	—	—	—	—
Great Lakes Aviation	32	—	—	—	—	27	—	27	5	—	—	3	2	
Gulf Flite Center dba Skybus Express	1	—	—	—	—	—	—	—	1	—	—	—	1	—
Gulfstream Int'l Air	9	—	—	—	—	3	—	3	6	—	—	6	—	—
Hageland Aviation	12	—	—	—	—	—	—	—	12	—	—	2	10	—
Haines Airways Inc	6	—	—	—	—	1	—	1	5	—	—	—	5	—
Harbor Airlines Inc	4	—	—	—	—	4	—	4	—	—	—	—	—	—
Horizon Air Inc dba Mohawk/Manhattan Exps Air	7	2	—	—	2	5	—	5	—	—	—	—	—	—
Hyannis Air Service	9	—	—	—	—	—	—	—	9	—	—	9	—	—
Jet Express Inc dba TWA Express	6	—	—	—	—	5	—	5	1	—	—	—	1	—
Jetstream Intern. dba USAir Express	33	—	—	—	—	33	—	33	—	—	—	—	—	—
Jib Inc dba Action Airlines	9	—	—	—	—	4	—	4	5	—	—	2	3	—
Kenmore Air Habor	14	—	—	—	—	—	—	—	14	—	—	—	14	—
Kenosha Aero Inc	2	—	—	—	—	—	—	—	2	—	—	1	1	—
Ketchikan Air Servic	11	—	—	—	—	—	—	—	11	—	—	—	11	—
L A B Flying Service	34	—	—	—	—	1	—	1	27	—	—	6	21	6
Lake Union Air Serv	10	—	—	—	—	2	—	2	8	—	—	—	8	—
Larrys Flying Servic	19	—	—	—	—	7	—	7	12	—	—	2	10	—
Las Vegas Airlines	5	—	—	—	—	5	—	5	—	—	—	—	—	—
Loken Aviation Inc	3	—	—	—	—	—	—	—	3	—	—	—	3	—
Ludlow Aviation	3	—	—	—	—	—	—	—	3	—	—	—	3	—
Mesa Airlines Inc dba United Express	72	—	—	—	—	72	—	72	—	—	—	—	—	—
Midway Aviation Inc	8	—	—	—	—	—	—	—	8	—	—	7	1	—
Montauk Caribbean dba Long Island Airline	6	1	—	—	1	4	—	4	1	—	—	1	—	—
New England Airlines	7	—	—	—	—	—	—	—	7	—	—	2	5	—
New York Helicopter dba National Helicopter	9	—	—	—	—	—	—	—	—	—	—	—	—	9
Olson Air Service	8	—	—	—	—	—	—	—	6	—	—	2	4	2
Pacific Coast Airlin	2	—	—	—	—	2	—	2	—	—	—	—	—	—
Pacific Island Aviat	8	—	—	—	—	2	—	2	3	—	—	3	—	3
Papillon Airways Inc dba Grand Canyon Helicopters	14	—	—	—	—	—	—	—	—	—	—	—	—	14
Peninsula Airways	39	—	—	—	—	13	—	13	26	—	—	12	14	—
Precision Valley dba Northwest Airlink	15	—	—	—	—	15	—	15	—	—	—	—	—	—
R I C Inc dba Skymaster Air Taxi	3	—	—	—	—	3	—	3	—	—	—	—	—	—
Redwing Airways Inc	7	—	—	—	—	4	—	4	3	—	—	2	1	—
Ryan Air Service dba PHH Air	15	-	—	—	—	—	—	—	15	—	—	4	11	—

TABLE 5.5—Continued
TOTAL SMALL AIRCRAFT REPOTED IN OPERATION BY COMMUTER AIR CARRIERS AND ON—DEMAND AIR TAXIS BY CARRIER, AND BY ENGINE TYPE
1992

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston					Rotary Wing
		Total	4–eng.	3–eng.	2–eng.	Total	4–eng.	2–eng.	Total	4–eng.	3–eng.	2–eng.	1–eng.	
Saber Aviation Inc	4	—	—	—	—	1	—	1	3	—	—	3	—	—
Safe Air internation dba Island Expesss	3	—	—	—	—	—	—	—	3	—	—	3	—	—
Samoa Aviation	3	—	—	—	—	3	—	3	—	—	—	—	—	—
Scenic Airlines	18	—	—	—	—	18	—	18	—	—	—	—	—	—
Sedona Air Center	4	—	—	—	—	—	—	—	4	—	—	—	4	—
Skagway Air Service	11	—	—	—	—	—	—	—	11	—	—	2	9	—
Sky One Express Airl	3	—	—	—	—	3	—	3	—	—	—	—	—	—
Skywest Airlines dba Western Express	51	—	—	—	—	51	—	51	—	—	—	—	—	—
Southcentral Air	20	—	—	—	—	10	—	10	10	—	—	1	9	—
Southeast Aviation Group	2	—	—	—	—	—	—	—	2	—	—	—	2	—
Springdale Air Servi	20	—	—	—	—	4	—	4	16	—	—	16	—	—
Stateswest Airlines dba USAir Express	11	—	—	—	—	11	—	11	—	—	—	—	—	—
Saquan Air Service	12	—	—	—	—	—	—	—	12	—	—	—	12	—
Satonduk Outfitters	4	—	—	—	—	—	—	—	4	—	—	—	4	—
Srail Lake Flyin Ser dba Harbor Air Service	5	—	—	—	—	—	—	—	5	—	—	—	5	—
Srans Executive Airl dba Trans World Express	3	—	—	—	—	—	—	—	3	—	—	3	—	—
Sropical Helicopter	2	—	—	—	—	—	—	—	—	—	—	—	—	2
Vieques Air Link Inc	6	—	—	—	—	—	—	—	6	—	3	3	—	—
Village Aviation Inc	10	—	—	—	—	3	—	3	7	—	—	—	7	—
Virgin Air Inc dba Air St Thomas	7	—	—	—	—	—	—	—	7	—	1	6	—	—
Walkers Aviation Ser	1	—	—	—	—	1	—	1	—	—	—	—	—	—
Warbelow Air Venture	9	—	—	—	—	4	—	4	5	—	—	—	5	—
West Isle Air	6	—	—	—	—	—	—	—	6	—	—	1	5	—
WRA Inc	10	—	—	—	—	5	—	5	5	—	—	3	2	—
Wright Air Service	14	—	—	—	—	4	—	4	6	—	—	—	6	4
Yutana Airlines Inc	9	—	—	—	—	1	—	1	8	—	—	1	7	—
Yute Air Alaska Inc	21	—	—	—	—	1	—	1	20	—	—	—	20	—

Note: Air Carrier aircraft are aircraft carrying passengers or cargo for compensation or hire under 14 CFR 121 (large aircraft —more than 30 seats) and 14 CFR 135 (small aircraft —30 seats or less). This definition is more encompassing than that used in the **FAA Aviation Forecast** —jet aircraft, 60 seats or more, carrying passengers or cargo for compensation or hire.

Source: Vital Information System

VI. U.S. CERTIFICATED AIR CARRIERS—OPERATING DATA

The traffic and financial data contained in this chapter include data for all U.S. Certificated Air Carriers—those holding a certificate issued under Section 401 of the Federal Aviation Act of 1958; and the commuter air carriers—those holding a certificate under Section 298C of the Federal Aviation Act of 1958.

The data are classified in two broad operational categories: "domestic" and "international". "Domestic" encompasses operations within and between the 50 states of the United States, the District of Columbia, the Commonwealth of Puerto Rico and the Virgin Islands. It also encompasses Canadian transborder operations and for certain carriers, Mexican transborder operations. All other categories are considered "international".

The certificated carriers are also grouped into "large" and "small" according to the size aircraft that the carrier operates. A "large" carrier is one that operates aircraft designed to have a maximum passenger seating capacity of 60 seats or more or a maximum payload capacity of 18,000 pounds or more, or conducts international operations. A "small" certificated carrier operates aircraft of less than 60 seats or a payload capacity of less than 18,000. The commuter carriers are grouped with the small certificated carriers. Note that these definitions for large and small aircraft differ from the definitions used in Chapter 5.

The large certificated air carriers are grouped according to their total operating revenue as listed below:

Carrier Groups	Carriers with Annual Operating Revenues of:
Major	$1,000,000,000+
Nationals	$100,000,000 - $1,000,000,000
Large Regionals	$10,000,000 - $99,999,999
Medium Regionals	0 - $9,999,999

The tables in this chapter are divided into two groups: 6.1-6.15 cover the large carriers and 6.16-6.18 cover the small commuter and large certificated medium regional carriers. Please note that some large certificated medium regional carriers are included in both groups of tables. The information for the large air carriers was obtained from the following sources published by the Research & Special Programs Administration of the Department of Transportation.

Air Carrier Traffic Statistics compiled from RSPA Form 41 Schedules T-1(a), T-1(b) and T-1(c).

Air Carrier Financial Statistics compiled from RSPA Form 41 Schedules B-1 and P-1.

The information for the small certificated, commuter and large certificated medium regional carriers was obtained from:

Air Carrier Industry Scheduled Service Traffic Statistics: Medium Regional Section: compiled from RSPA Form 298C Schedules A-1 and T-1.

TABLE 6.1
LARGE CERTIFICATED AIR CARRIERS
1991 AND 1992

MAJORS

America West	Northwest
American	Pan Amercian
Continental	Southwest
Delta	Trans World
Eastern	United
Federal Express	US Air

NATIONALS

Air Wisconsin	Midway
Alaska	Midwest Express
Aloha	Southern Air
American Trans Air	Tower
Emery	United Parcel Service
Evergreen	USAir Shuttle
Hawaiian	Westair
Horizon Air	World
Markair	

LARGE REGIONALS

Air Transport Int'l	Key
American Int'l	Kiwi
Amerijet	MGM Grand
Arrow	Northern Air
Aspen	Reeve
Braniff Int'l	Reno
Carnival	Rich
Challenge Air Cargo	Simmons
Executive Airlines	Sun Country
Express One	Trans Continental
Flagship	Trans States
Florida West	Zantop

MEDIUM REGIONALS

Aerial	Million
Airline of the Americas	North American
Airmark	Patriot
AV Atlantic	Private Jet
Buffalo	Ryan International
Casino Express	Sierra Pacific
Conner	Spirit Air
Fine Airlines	Trans Air Link
Great American	Universal
Int'l. Cargo Xpress	Wilbur's
Jet Fleet	Worldwide
Miami Air	Wrangler

TABLE 6.2
TRAFFIC DATA, ALL SERVICES (SCHEDULED AND NONSCHEDULED) OF THE LARGE CERTIFICATED AIR CARRIERS 1991 AND 1992

Traffic Category	Total System [1]		Domestic Operations		International Operations	
	1991 [2]	1992 [3]	1991 [2]	1992 [3]	1991 [2]	1992 [3]
Revenue Passenger Miles Flown (000)	493,163,306	463,296,381	354,289,946	338,085,364	138,873,360	125,211,017
Available Seat Miles (000)	771,788,235	738,029,603	566,089,746	551,561,946	205,698,489	186,467,657
Revenue Passenger Enplanements (000)	483,040	461,202	436,101	417,419	46,939	43,783
Revenue Ton Miles Flown (000) 1/	66,462,177	62,479,347	45,134,497	42,668,248	21,327,680	19,811,099
Passenger	49,318,055	46,329,643	35,428,994	33,808,540	13,889,061	12,521,103
Freight	15,079,800	14,245,126	8,137,481	7,448,256	6,942,319	6,796,870
U.S. Mail	2,064,337	1,904,764	1,568,036	1,411,643	496,301	493,121
Foreign Mail	0	0	0	0	0	0
Revenue Aircraft Miles Flown (000)	4,855,877	4,661,022	3,953,891	3,854,416	901,986	806,606

[1] Details may not add to total due to rounding.
[2] Revised
[3] Preliminary

Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.3
REVENUE AIRCRAFT DEPARTURES, MILES AND HOURS FLOWN, AND AVERAGE SPEED IN DOMESTIC ALL SERVICES OF THE LARGE CERTIFICATED AIR CARRIERS
1983–1992

Year	Revenue Aircraft Departures	Revenue Aircraft Miles Flown (000)	Revenue Aircraft Hours Flown	Average Airborne Speed (Miles Per Hour)
1983	4,920,125	2,552,942	6,174,957	413
1984	5,358,454	2,875,402	6,970,886	412
1985	5,760,232	3,046,440	7,457,030	409
1986	6,336,150	3,421,492	8,223,615	416
1987	6,511,609	3,652,542	8,823,269	414
1988	6,607,067	3,738,242	9,135,430	409
1989	6,528,085	3,748,139	9,222,252	406
1990	6,756,704	3,963,263	9,717,375	408
1991 [1]	6,622,847	3,854,416	9,492,561	406
1992 [2]	6,695,742	3,953,891	9,658,470	409

[1] Revised.
[1] Preliminary.

Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.4
REVENUE AIRCRAFT DEPARTURES, MILES AND HOURS FLOWN, AND AVERAGE SPEED IN INTERNATIONAL ALL SERVICES OF THE LARGE CERTIFICATED AIR CARRIERS
1983–1992

Year	Revenue Aircraft Departures	Revenue Aircraft Miles Flown (000)	Revenue Aircraft Hours Flown	Average Airborne Speed (Miles Per Hour)
1983	243,029	362,994	740,896	490
1984	241,087	388,794	792,267	491
1985	244,888	415,355	846,197	491
1986	271,735	451,338	923,641	489
1987	311,411	529,786	1,082,189	490
1988	354,463	615,270	1,260,927	488
1989	391,786	693,887	1,426,410	486
1990	419,522	760,338	1,556,760	488
1991 [1]	418,200	806,606	1,644,917	490
1992 [2]	438,135	901,986	1,820,969	495

[1] Revised.
[2] Preliminary.

Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.5
TOTAL TON-MILES AVAILABLE IN ALL SERVICES OF THE LARGE CERTIFICATED AIR CARRIERS
1983–1992
(Thousands of Ton-Miles)

Year	Large Certificated Air Carriers		
	Total System [1]	Domestic Operations	International Operations
1983	68,778,295	52,724,653	15,920,720
1984	76,298,288	58,942,974	17,355,314
1985	80,565,182	61,337,807	19,227,375
1986	90,243,958	69,771,737	20,472,221
1987	99,152,795	75,741,397	23,411,398
1988	105,272,555	78,264,976	27,107,579
1989	109,397,126	78,955,003	30,442,123
1990	117,112,475	83,354,510	33,757,965
1991 [2]	116,374,506	80,879,199	35,495,307
1992 [3]	121,842,799	83,695,875	38,146,924

[1] Categories may not add to total due to rounding.
[2] Revised.
[3] Preliminary.
Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.6
REVENUE TON-MILES FLOWN IN ALL SERVICES BY LARGE CERTIFICATED AIR CARRIERS
1983–1992
(Thousands of Tons)

Year	Large Certificated Air Carriers		
	Total System [1]	Domestic Operations	International Operations
1983	38,011,227	28,271,465	9,624,208
1984	41,277,948	30,561,436	10,716,512
1985	44,154,779	32,939,216	11,215,563
1986	48,883,854	37,148,059	11,735,795
1987	54,917,632	40,509,782	14,407,850
1988	58,397,186	41,598,662	16,798,524
1989	61,095,371	42,475,761	18,619,610
1990	63,627,077	43,651,162	19,975,915
1991 [2]	62,479,347	42,668,248	19,811,099
1992 [3]	66,462,177	45,134,497	21,327,680

[1] Categories may not add to total due to rounding.
[2] Revised.
[3] Preliminary.
Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.7
PASSENGER OPERATIONS IN SCHEDULED DOMESTIC OPERATIONS OF THE LARGE CERTIFICATED AIR CARRIERS 1983–1992

Year	Revenue Passenger Enplanements (000)	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor [1] Percent	Average On-line Passenger Trip Length (Miles)	Average Passenger Revenue Per Passenger Miles (Cents)
1983	296,721	226,908,925	379,150,158	59.8	765	12.13
1984	321,047	243,692,254	422,506,609	57.7	759	12.79
1985	357,109	270,584,011	445,825,864	60.7	758	12.32
1986	393,864	302,089,903	497,990,815	60.7	767	11.18
1987	416,831	324,637,336	526,958,361	61.6	779	11.42
1988	419,210	329,309,489	536,662,591	61.4	786	12.31
1989	416,331	329,975,206	530,079,041	62.3	792	13.08
1990	423,565	340,230,892	563,064,938	60.4	803	13.08
1991 2/	412,360	332,565,881	543,637,976	61.2	806	13.24
1992 3/	429,900	347,502,877	557,103,106	62.4	808	12.86

[1] Percent revenue passenger-miles of available seat-miles.
[2] Revised.
[3] Preliminary.

Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.8
PASSENGER OPERATIONS IN SCHEDULED INTERNATIONAL OPERATIONS OF THE LARGE CERTIFICATED AIR CARRIERS 1983–1992

Year	Revenue Passenger Enplanements (000)	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor [1] Percent	Average On-line Passenger Trip Length (Miles)	Average Passenger Revenue Per Passenger Miles (Cents)
1983	21,917	54,920,223	85,387,821	64.3	2,506	10.21
1984	23,636	61,423,601	92,816,730	66.2	2,599	9.38
1985	24,913	65,819,010	101,962,568	64.6	2,642	9.80
1986	25,082	64,455,952	109,445,032	58.9	2,570	10.16
1987	30,847	79,834,148	121,762,577	65.6	2,588	9.82
1988	35,404	93,992,070	140,139,737	67.1	2,655	10.40
1989	37,361	102,739,103	154,296,835	66.6	2,750	10.36
1990	41,995	117,695,394	170,309,955	69.1	2,803	10.83
1991 [2]	39,941	115,388,948	171,561,164	67.3	2,889	11.32
1992 [3]	43,405	130,578,241	194,712,031	67.1	3,008	11.57

[1] Percent revenue passenger-miles of available seat-miles.
[2] Revised.
[3] Preliminary.
Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.9
REVENUE AIRCRAFT-MILES FLOWN IN ALL SERVICES OF LARGE CERTIFICATED AIR CARRIERS
1983–1992
(Thousands of Miles)

Year	Total [1]	Domestic Operations	International Operations
1983	2,922,583	2,552,942	362,994
1984	3,264,196	2,875,402	388,794
1985	3,461,795	3,046,440	415,355
1986	3,872,830	3,421,492	451,338
1987	4,182,327	3,652,542	529,786
1988	4,353,512	3,738,242	615,270
1989	4,442,026	3,748,139	693,887
1990	4,723,601	3,963,263	760,338
1991 [2]	4,661,022	3,854,416	806,606
1992 [3]	4,855,877	3,953,891	901,986

[1] Details may not add to total due to rounding.
[2] Revised.
[3] Preliminary.
Source: Air Carrier Traffic Statistics - RSPA

TABLE 6.10
OPERATING REVENUE OF DOMESTIC OPERATIONS, ALL SERVICES
LARGE CERTIFICATED AIR CARRIERS
MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
1983–1992
(Thousands of Dollars)

Year	Total Operating Revenues[1]		Passenger		U.S. Mail (Including Subsidy)		Express and Freight		Excess Baggage		Other	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1983	31,014,393	100.0	27,519,079	88.7	537,234	1.7	1,601,895	5.2	51,967	0.2	1,304,221	4.2
1984	35,393,945	100.0	31,436,951	88.8	559,138	1.6	1,715,979	4.8	70,032	0.2	1,611,842	4.6
1985	37,628,540	100.0	33,343,005	88.6	740,384	1.9	1,580,914	4.2	78,113	0.2	1,886,123	5.0
1986	41,000,506	100.0	33,813,923	82.5	682,643	1.7	4,278,008	10.4	85,438	0.2	2,140,496	5.2
1987	45,657,800	100.0	37,492,065	82.2	706,178	1.5	4,951,924	10.9	66,756	0.1	2,440,877	5.3
1988	50,187,181	100.0	41,001,573	81.7	791,929	1.6	5,807,058	11.6	71,781	0.1	2,514,841	5.0
1989	54,314,210	100.0	43,670,025	80.4	770,333	1.4	5,408,336	10.0	69,761	0.1	4,395,754	8.1
1990	57,994,041	100.0	46,282,413	79.8	749,428	1.3	4,275,637	7.4	76,129	0.1	6,610,433	11.4
1991[2]	56,230,433	100.0	44,593,991	79.3	737,459	1.3	4,486,691	8.0	78,083	0.1	6,334,209	11.3
1992[3]	57,628,804	100.0	45,227,769	78.5	933,899	1.6	4,648,835	8.1	87,259	0.2	6,731,042	11.7

[1] Details may not add to total due to rounding.
[2] Revised.
[3] Preliminary.

Source: Air Carrier Financial Statistics, Table 1 -- RSPA

TABLE 6.11
OPERATING EXPENSES OF DOMESTIC OPERATIONS, ALL SERVICES
LARGE CERTIFICATED AIR CARRIERS
MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
1983–1992
(Thousands of Dollars)

Year	Total Operating Expenses[1]		Aircraft Operating Expenses						Ground and Indirect Expense		Net Operating Income or Loss Amount
	Amount	Percent	Flight Operations		Maintenance		Depreciation and Amortization		Amount	Percent	
			Amount	Percent	Amount	Percent	Amount	Percent			
1983	31,185,661	100.0	11,370,479	36.5	2,877,991	9.2	2,107,283	6.8	14,829,909	47.6	(171,268)
1984	33,811,742	100.0	12,160,526	36.0	3,175,865	9.4	2,223,275	6.6	16,252,075	48.1	1,582,203
1985	36,610,744	100.0	12,684,018	34.7	3,604,447	9.8	2,318,066	6.3	18,004,213	49.2	1,017,796
1986	39,934,036	100.0	11,368,346	28.5	4,475,473	11.2	2,652,497	6.6	21,437,719	53.7	1,066,470
1987	43,925,149	100.0	12,508,716	28.5	4,950,558	11.3	2,854,606	6.5	23,611,068	53.7	1,732,650
1988	47,738,808	100.0	13,175,525	27.6	5,642,790	11.8	2,977,236	6.2	25,943,257	54.4	2,448,873
1989	52,459,535	100.0	14,749,292	28.1	6,184,193	11.8	3,077,602	5.9	28,448,448	54.2	1,854,675
1990	58,983,230	100.0	18,166,482	30.8	6,921,512	11.7	3,272,818	5.5	30,622,417	51.9	(989,189)
1991[2]	56,758,157	100.0	16,830,585	29.7	6,682,050	11.8	3,216,986	5.7	30,028,538	52.9	(527,724)
1992[3]	58,724,907	100.0	17,154,393	29.2	6,865,669	11.7	3,338,850	5.7	31,365,996	53.4	(1,096,105)

[1] Details may not add to total due to rounding.
[2] Revised.
[3] Preliminary

Source: Air Carrier Financial Statistics, Table 1 -- RSPA

TABLE 6.12
OPERATING REVENUE OF INTERNATIONAL OPERATIONS, ALL SERVICES
LARGE CERTIFICATED AIR CARRIERS
MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
1983–1992
(Thousands of Dollars)

Year	Total Operating Revenues[1]		Passenger		U.S. Mail (Including Subsidy)		Express and Freight		Excess Baggage		Other	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1983	7,163,275	100.0	5,604,902	78.2	152,455	2.1	999,405	14.0	23,012	0.3	383,502	5.4
1984	7,974,706	100.0	6,074,406	76.2	157,703	2.0	1,169,259	14.8	27,447	0.3	545,892	6.8
1985	8,302,279	100.0	6,451,324	77.7	160,543	1.9	1,130,050	13.6	27,832	0.3	531,528	6.4
1986	8,621,149	100.0	6,550,550	76.0	153,627	1.8	1,451,488	16.8	28,254	0.3	437,231	5.1
1987	10,924,837	100.0	8,374,295	76.7	180,052	1.6	1,782,832	16.3	32,688	0.3	554,971	5.1
1988	13,401,710	100.0	10,356,637	77.3	183,251	1.4	2,150,132	16.0	39,285	0.3	672,405	5.0
1989	14,910,912	100.0	11,181,198	75.0	188,284	1.3	2,416,980	16.2	46,759	0.3	1,077,692	7.3
1990	17,990,355	100.0	13,467,960	74.9	223,840	1.2	2,601,668	14.5	43,244	0.2	1,653,644	9.2
1991[2]	18,928,061	100.0	14,102,721	74.5	222,833	1.2	3,134,202	16.6	49,584	0.3	1,418,721	7.5
1992[3]	20,490,267	100.0	15,663,944	76.4	243,980	1.2	2,988,295	14.6	46,702	0.2	1,547,347	7.6

[1] Details may not add to total due to rounding.
[2] Revised.
[3] Preliminary.

Source: Air Carrier Financial Statistics, Table 1 -- RSPA

TABLE 6.13
OPERATING EXPENSES OF INTERNATIONAL OPERATIONS, ALL SERVICES
LARGE CERTIFICATED AIR CARRIERS
MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
1983–1992
(Thousands of Dollars)

Year	Total Operating Expenses[1]		Aircraft Operating Expenses						Ground and Indirect Expense		Net Operating Income or Loss Amount
	Amount	Percent	Flight Operations		Maintenance		Depreciation and Amortization		Amount	Percent	
			Amount	Percent	Amount	Percent	Amount	Percent			
1983	6,692,776	100.0	2,490,076	37.2	547,741	8.2	388,708	5.8	3,266,252	48.8	470,499
1984	7,484,679	100.0	2,628,664	35.1	676,950	9.0	445,857	6.0	3,733,208	49.9	490,028
1985	7,983,705	100.0	2,738,439	34.4	768,018	9.6	481,560	6.0	3,995,687	50.0	318,574
1986	8,458,084	100.0	2,401,911	28.4	900,784	10.7	517,524	6.1	4,637,866	54.8	163,066
1987	10,226,388	100.0	2,836,095	27.7	1,095,635	10.7	533,079	5.2	5,761,579	56.4	698,450
1988	12,403,323	100.0	3,230,335	26.1	1,331,687	10.7	617,734	5.0	7,223,567	58.2	998,388
1989	14,953,533	100.0	3,918,537	26.2	1,723,953	11.5	746,047	5.0	8,564,996	57.3	(42,620)
1990	18,914,480	100.0	5,453,830	28.8	2,051,246	10.8	886,735	4.7	10,522,670	55.6	(924,123)
1991[2]	20,185,077	100.0	5,636,310	27.9	2,152,099	10.7	892,025	4.4	11,504,643	57.0	(1,257,016)
1992[3]	21,767,130	100.0	5,837,911	26.8	2,144,162	9.9	1,033,166	4.7	12,751,890	58.6	(1,276,862)

[1] Details may not add to total due to rounding.
[2] Revised.
[3] Preliminary.

Source: Air Carrier Financial Statistics, Table 1 -- RSPA

TABLE 6.14
OPERATING REVENUE, SYSTEM, ALL SERVICES
LARGE CERTIFICATED AIR CARRIERS
MEDIUM REGIONAL GROUP
1983–1992
(Thousands of Dollars)

Year	Total Operating Revenues[1]		Scheduled Passenger		Scheduled Other		Non Scheduled Service		Subsidy		Other Transport Related	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1983	108,082	100.0	19,126	17.7	9,897	9.2	73,469	68.0	2,132	2.0	3,457	3.2
1984	159,837	100.0	61,966	38.8	7,063	4.4	83,249	52.1	1,561	1.0	5,998	3.7
1985	150,754	100.0	38,045	25.2	19,467	12.9	89,863	59.6	0	0.0	3,379	2.2
1986	81,971	100.0	10,576	12.9	43	0.1	61,729	75.4	0	0.0	9,624	11.7
1987	114,593	100.0	6,845	6.0	4,521	3.9	85,406	74.5	0	0.0	17,821	15.6
1988	70,035	100.0	0	0.0	716	1.1	65,850	94.0	0	0.0	3,470	5.0
1989	90,733	100.0	5,773	6.4	7,494	8.3	64,392	70.9	31	0.0	13,042	14.4
1990	82,133	100.0	3,040	3.7	6,112	7.4	68,667	83.6	0	0.0	4,314	5.3
1991[2]	75,741	100.0	0	0.0	10,723	14.2	59,626	78.7	1,048	1.4	4,344	5.7
1992[3]	216,797	100.0	15,543	7.2	4,634	2.1	188,005	86.7	1,228	0.6	7,386	3.4

[1] Details may not add to total due to rounding.
[2] Revised.
[3] Preliminary.

Source: Air Carrier Financial Statistics, Table 3 -- RSPA

Note: Wide fluctuations in total revenues and expenses are caused by fluctuations in the number of medium regional carriers. Some have been upgraded to large regional carriers and some have gone out of business. For list of medium regional carriers see Air Carrier Financial Statistics for year in question.

TABLE 6.15
OPERATING EXPENSES, SYSTEM, ALL SERVICES
LARGE CERTIFICATED AIR CARRIERS
MEDIUM REGIONAL GROUP
1983–1992
(Thousands of Dollars)

Year	Total Operating Expenses[1]		Flying Operations		Maintenance		General and Administrative		Depreciation and Amortization		Transport Related	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1983	111,713	100.0	68,130	61.0	17,693	15.8	18,327	16.4	7,353	6.6	210	0.2
1984	159,680	100.0	89,995	56.4	21,572	13.5	37,866	23.7	9,885	6.2	361	0.2
1985	151,527	100.0	79,920	52.8	22,585	14.9	42,703	28.2	5,179	3.4	1,140	0.7
1986	87,359	100.0	45,435	52.0	14,515	16.6	17,436	20.0	2,616	3.0	7,356	8.4
1987	120,019	100.0	56,061	46.7	25,533	21.3	27,351	22.8	6,269	5.2	4,803	4.0
1988	76,823	100.0	32,629	42.5	18,191	23.7	18,779	24.4	5,731	7.5	1,494	1.9
1989	91,518	100.0	43,560	47.6	15,469	16.9	21,400	23.4	1,214	1.3	9,876	10.8
1990	87,081	100.0	51,067	58.6	15,643	18.0	16,684	19.2	3,636	4.2	50	0.1
1991[2]	77,958	100.0	46,994	60.3	12,439	16.0	14,485	18.6	2,892	3.7	1,149	1.5
1992[3]	218,594	100.0	129,486	59.2	43,051	19.7	36,005	16.5	8,309	3.8	1,743	0.8

[1] Details may not add to total due to rounding.
[2] Revised.
[3] Preliminary.

Source: Air Carrier Financial Statistics, Table 3 -- RSPA

Note: Wide fluctuations in total revenues and expenses are caused by fluctuations in the number of medium regional carriers. Some have been upgraded to large regional carriers and some have gone out of business. For list of medium regional carriers see Air Carrier Financial Statistics for year in question.

TABLE 6.16
SMALL CERTIFICATED AND COMMUTER AIR CARRIERS
1991 and 1992

Action Airlines
Advantage Airlines
Aerial Transit Company
Aero Coach
Air Alpha
Air Cape
Air L. A.
Air Midwest, Inc.
Air Molakai
Air Nevada Airlines, Inc.
Air Resorts
Air Sedona
Air Sunshine
Air Vegas
Air West Airlines
Airvantage
Airways Int'l
Alaska Island Air
Aleutian Air
Alliance Air
Aloha Island Air
Alpha Air
Alpine Air
Arctic Circle Air Service
Arizona Pacific
Atlantic Coast Airlines
Atlantic Southeast Airlines
Aviation Associates
Aviation Services West
Baker Aviation
Bar Harbor Airways
Barrow Air
Bellair
Bemidji Airlines
Bering Air
Big Sky Airlines
Business Express Airlines
Cape Air
Cape Smythe Air Service
Casino
CCair
Chalks Int'l Airlines
Chartair
Charter One
Chautauqua Airlines
Christman Air System
Coastal Air Transport
Colgan Air
Columbia Pacific
Comair
Command Airways
Commutair
Conner Air lines
Conquest Airlines
Continental Express
Crown Airways
Dawn Air
Direct Air
Ellis Air Taxi
Empire Airways
ERA Aviation
Exec Express II
Executive Transport
Express Airlines I
Fine Airlines, Inc.
Flagship
Flamenco Airways
Florida Air
Flying Boat
Freedom Air
Frontier Flying Service
GP Express
Grand Airways
Grand Canyon Helicopters
Great Lakes Aviation
Gulf Air Taxi
Gulf Flite Center
Gulfstream Int'l
Hageland Aviation Service
Haines Airways
Harbor Air Service
Harbor Airlines
Helitrans
Henson Aviation
Illiana Air Taxi
Island Express
Jet Express
Jetstream Int'l Airlines
Kenmore Air Harbor
Ketchikan Air Service
L.A.B. Flying Service
L'Express
Lake Union Air Services
Lapsa
Larry's Flying Service
Las Vegas Air Lines
Loken
Long Island Airlines
Mall Airways
Markair Express
Mesa Airlines
Mesaba Airlines
Metro Express
Metroflight
Midway Commuter
Midwest Aviation
Mohawk Airlines
Nashville Eagle
New England Airlines
New York Helicopter
Northeast Express Regional
Olson Air Service
Pacific Coast
Pacific Island
Pan Am Express
Panorama Air Tours
Paradise Island
Peninsula Airways
Pennsylvania Airlines
Precision Valley Aviation
Redwing
Rocky Mountain Airways
Ross Aviation
Ryan Air Service
Ryan Int'l
Samoa
Scenic Airlines
Sea Air Shuttle
Simmons Airlines*
Skagway Air Service
Sky One Express
Sky West Airlines
Skybus Express
Skymaster
Southcentral
Southeast Airlines
Spirit Air Lines
Springdale Air
Stateswest Airlines
Suburban Airlines
Tanana Air Service
Taquan Air Service
Tatonduk Flying Service
Temsco Airlines
Trans Air (Hawaii)
Trans World Express
Trump Air
Valley Airlines
Vieques Air Link
Village Aviation
Virgin Air
Walker's International
Warbelow's Air Ventures
West Isle Air
Westates
Wilburs
Wings Airways
Wings of Alaska
Wings West
WRA
Wright Air Service
Yutana Airlines
Yute Air Alaska
40-Mile Air

* Large certificated medium regional air carrier.

TABLE 6.17
SMALL CERTIFICATED, COMMUTER AND LARGE CERTIFICATED MEDIUM REGIONAL AIR CARRIERS TRAFFIC DATA SCHEDULED SERVICES ONLY 1983–1992

Category	1983	1984	1985	1986	1987	1988	1989	1990	1991[1]	1992[2]
Revenue Passenger Miles (000)	2,228,453	4,601,837	3,031,817	3,352,187	3,986,637	4,582,522	5,052,222	5,875,960	6,022,536	7,188,917
Revenue Enplanements (000)	15,941	20,230	18,853	20,849	24,839	27,801	29,612	33,491	32,713	36,476
Passenger Ton Miles (000)	222,189	460,135	302,783	335,264	396,887	456,894	456,794	586,266	599,521	716,676
Cargo Ton Miles (000)	7,752	18,291	67,400	49,927	54,659	6,333	43,031	67,693	26,533	15,640
Aircraft Revenue Miles (000)	242,120	304,217	323,945	347,181	395,998	437,818	546,652	612,018	522,536	581,300
Aircraft Revenue Hours	1,464,879	1,759,848	1,832.623	1,940,095	2,193,230	2,389,988	2,589,223	3,016,836	2,704,553	2,904,440
Aircraft Departures	2,287,504	2,706,142	2,755,616	2,866,653	3,132,899	3,323,772	3,284,610	3,624,162	3,495,284	3,664,121

[1] Preliminary
[2] Revised

Source: Air Carrier Industry Scheduled Traffic Statistics, RSPA

TABLE 6.18
SMALL CERTIFICATED, COMMUTER AND LARGE CERTIFICATED MEDIUM REGIONAL AIR CARRIERS TRAFFIC AVERAGES SCHEDULED SERVICES ONLY 1983–1992

Category	1983	1984	1985	1986	1987	1988	1989	1990	1991[1]	1992[2]
Passengers Per Aircraft Mile	9.2	15.1	9.4	9.7	10.1	10.5	9.2	9.9	11.5	12.4
Available Seats Per Aircraft Mile	20.7	30.0	21.3	21.5	21.8	22.6	19.5	20.9	24.6	25.3
Revenue Tons Per Aircraft Mile	1.0	1.6	1.1	1.1	1.1	1.1	1.0	1.2	1.2	1.3
Available Tons Per Aircraft Mile	2.3	3.3	2.7	2.5	2.7	2.4	2.2	2.4	2.7	2.8
Flight Stage Length (Miles)	105.8	112.3	117.6	128.7	126.4	131.7	165.5	168.9	149.5	158.5

[1] Preliminary
[2] Revised

Source: Air Carrier Industry Scheduled Traffic Statistics, RSPA

VII. U.S. CIVIL AIRMEN

Statistics pertaining to airmen, both pilot and nonpilot, were obtained from the official airmen certification records maintained by the Airmen Certification and Medical Certification Branches of the Mike Monroney Aeronautical Center at Oklahoma City, Oklahoma.

Active pilots are those pilots who hold a pilot certificate and a valid medical certificate—one that was issued within the last 25 months. Glider pilots may have, but are not required to have, a medical examination. The inventory data for this category includes only those with a valid medical certificate.

For those nonpilot certificates for which a medical certificate is not required (mechanics, parachute riggers, ground instructors, and dispatchers), the numbers shown include all who have been issued that airman certificate.

Table 7.1
ESTIMATED ACTIVE PILOT CERTIFICATES HELD
DECEMBER 31, 1983–1992

Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Pilot—Total	**718,004**	**722,376**	**709,540**	**709,118**	**699,653**	**694,016**	**700,010**	**702,659**	**692,095**	**682,959**
Student[1]	147,197	150,081	146,652	150,273	146,016	136,913	142,544	128,663	120,203	114,597
Recreational[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	87	161	187
Airplane[2]										
Private	318,643	320,086	311,086	305,736	300,949	299,786	293,179	299,111	293,306	288,078
Commercial	159,495	155,929	151,632	147,798	143,645	143,030	144,540	149,666	148,365	146,385
Airline Transport	75,938	79,192	82,740	87,186	91,287	96,968	102,087	107,732	112,167	115,855
Helicopter (only)[3]	7,237	7,532	8,123	8,581	8,702	8,608	8,863	9,567	9,860	9,652
Glider (only)[4,5]	8,157	8,390	8,168	8,411	7,901	7,600	7,708	7,833	8,033	8,205
Lighter-than-air[5,6]	1,337	1,166	1,139	1,133	1,153	1,111	1,089	[6]	[6]	[6]
Flight Instructor Certificates[7]	**62,201**	**61,173**	**58,940**	**57,355**	**60,316**	**61,798**	**61,472**	**63,775**	**69,209**	**72,148**
Instrument Ratings[7,8]	**254,271**	**256,584**	**259,559**	**262,388**	**266,122**	**273,804**	**282,804**	**297,073**	**303,193**	**306,169**
Nonpilot—Total	**413,199**	**426,802**	**395,139**	**410,079**	**427,962**	**448,710**	**468,405**	**492,237**	**517,462**	**540,548**
Mechanic[9]	288,335	298,028	274,100	284,241	297,178	312,419	326,243	344,282	366,392	384,669
Parachute Rigger[9]	10,074	10,194	9,395	9,535	9,659	9,770	9,879	10,094	7,916	8,163
Ground Instructor[9]	66,385	67,463	58,214	59,443	60,861	62,582	64,503	66,882	70,086	73,276
Dispatcher[9]	8,223	8,980	8,511	9,025	9,491	10,020	10,455	11,002	11,607	12,264
Flight Navigator	1,636	1,603	1,542	1,512	1,445	1,400	1,357	1,290	1,225	1,154
Flight Engineer	38,546	40,534	43,377	46,323	49,328	52,519	55,968	58,687	60,236	61,022

[1] Category of certificate unknown.

[2] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate.

[3] See table 7 for the total number of pilots with a helicopter certificate.

[4] See table 8 for the total number of pilots with a glider certificate.

[5] Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination within the last 25 months.

[6] Lighter-than-air type ratings are no longer being issued.

[7] Not included in total.

[8] Special ratings shown on pilot certificates, do not indicate additional certificates.

[9] Numbers represent all certificates on record. No medical examination required.

N/A Not available. Recreational certificate first issued in 1990.

Table 7.2
ESTIMATED ACTIVE WOMEN PILOT CERTIFICATES HELD
DECEMBER 31, 1983–1992

Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Pilot—Total	**43,648**	**44,339**	**43,483**	**43,082**	**42,576**	**42,299**	**42,366**	**40,515**	**40,931**	**40,620**
Student[1]	18,696	19,435	19,058	18,899	18,367	17,529	17,637	15,007	14,501	13,921
Recreational[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	15	10
Airplane[2]										
Private	18,801	18,616	17,974	17,532	17,349	17,544	16,988	17,301	17,514	17,276
Commercial	4,261	4,232	4,185	4,176	4,208	4,410	4,760	5,210	5,652	5,918
Airline Transport	884	1,032	1,184	1,334	1,538	1,745	1,898	2,082	2,308	2,530
Helicopter (only)	144	167	196	232	247	259	273	292	307	313
Glider (only)[3]	599	631	653	667	627	590	586	617	634	652
Lighter-than-air[3, 4]	243	226	233	242	242	222	224	[4]	[4]	[4]
Flight Instructor Certificates[5]	**2,685**	**2,736**	**2,731**	**2,687**	**2,909**	**3,018**	**3,074**	**3,239**	**3,629**	**3,964**
Nonpilot—Total	**6,151**	**6,591**	**6,017**	**6,502**	**7,101**	**7,842**	**10,683**	**9,557**	**10,324**	**11,514**
Mechanic[6]	1,493	1,649	1,775	1,964	2,237	2,565	2,892	3,333	3,901	4,398
Parachute Rigger[6]	605	614	412	414	428	441	451	474	363	390
Ground Instructor[6]	3,554	3,680	2,980	3,087	3,232	3,391	3,554	3,760	3,952	4,338
Dispatcher[6]	249	310	394	460	524	622	711	802	852	1,004
Flight Navigator	2	2	1	0	0	1	1	0	0	0
Flight Engineer	248	336	455	577	680	822	3,074	1,188	1,256	1,384

[1] Category of certificate unknown.

[2] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate.

[3] Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination within the last 25 months.

[4] Lighter-than-air type ratings are no longer being issued.

[5] Not included in total.

[6] Numbers represent all certificates on record. No medical examination required.

N/A Not available. Recreational certificate first issued in 1990.

Table 7.3
ESTIMATED ACTIVE PILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATE AND BY FAA REGION DECEMBER 31, 1992

Class of Certificate	Total[1]	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	South-west	Western Pacific	Outside U.S.[2]
Total—All Pilots	**682,958**	**9,566**	**33,461**	**87,768**	**111,713**	**30,925**	**66,462**	**119,429**	**78,367**	**115,545**	**29,724**
Student[3]	114,597	1,240	5,356	16,819	19,521	5,384	10,596	19,460	12,243	18,622	5,356
Recreational[3]	187	1	14	36	50	15	7	40	9	7	8
Airplane[4]											
Private —Total	**288,078**	**4,357**	**16,756**	**36,953**	**53,571**	**13,916**	**28,486**	**45,916**	**31,262**	**50,526**	**8,324**
Private Airplane (only)	276,713	4,229	16,257	35,327	52,193	13,407	27,371	43,978	30,117	48,153	5,681
Private Airplane, Private Glider	4,030	35	173	645	606	190	391	641	376	899	74
Private Airplane, Commercial Glider	893	3	19	173	142	66	122	97	74	189	8
Private Airplane, Private Gyroplane	28	0	2	0	7	2	3	6	5	3	0
Private Airplane, Private Helicopter	1,731	20	71	217	172	93	172	243	166	377	200
Private Airplane, Private Glider, Private Helicopter	68	0	1	14	9	7	4	10	3	11	9
Private Airplane, Commercial Helicopter	4,561	69	234	568	440	149	428	926	516	882	349
Private Airplane, Private Glider, Commercial Helicopter	37	1	1	6	1	1	4	10	3	8	2
Private Airplane, Commercial Glider, Commercial Helicopter	15	0	0	3	0	1	0	4	2	4	1
Private Airplane, Commercial Gyroplane, Commercial Helicopter	2	0	0	0	1	0	0	1	0	0	0
Commercial—Total	**146,385**	**2,466**	**7,028**	**17,621**	**22,165**	**5,697**	**13,750**	**26,298**	**17,964**	**23,458**	**9,938**
Commercial Airplane (only)	126,797	2,155	6,157	14,917	19,953	4,971	11,689	22,204	15,534	19,688	9,529
Commercial Airplane, Private Glider	2,055	29	91	312	311	77	210	365	226	409	25
Commercial Airplane, Commercial Glider	3,630	31	138	561	480	200	462	584	393	745	36
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	0	0	0	0	0	0	0	0	1	0
Commercial Airplane, Private Helicopter	401	4	23	58	53	17	36	70	36	83	21
Commercial Airplane, Commercial Glider, Private Helicopter	27	0	0	5	6	1	1	3	4	6	1
Commercial Airplane, Commercial Helicopter	12,767	237	587	1,670	1,285	397	1,272	2,943	1,698	2,363	315
Commercial Airplane, Private Glider, Commercial Helicopter	149	2	5	22	21	7	19	30	12	27	4
Commercial Airplane, Commercial Glider, Commercial Helicopter	509	7	22	74	48	26	56	89	57	125	5
Commercial Airplane, Commercial Helitcopter, Commercial Gyroplane	18	0	1	2	1	0	2	3	1	6	2
Commercial Airplane, Commercial Gyroplane	20	1	3	0	5	1	2	5	1	2	0
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter Commercial Glider	11	0	1	0	2	0	1	2	2	3	0
Airline Transport —Total	**115,855**	**1,393**	**3,832**	**13,364**	**14,636**	**4,972**	**11,989**	**25,087**	**15,155**	**18,720**	**6,707**
Airline Transport Airplane (only)	113,692	1,328	3,786	12,991	14,452	4,846	11,802	24,629	14,815	18,409	6,634
Airline Transport Airplane, Airline Transport Helicopter	2,163	65	46	373	184	126	187	458	340	311	73
Rotorcraft (only)[5] **—Total**	**9,852**	**94**	**330**	**1,295**	**775**	**434**	**753**	**1,906**	**1,092**	**1,777**	**1,196**
Private Gyroplane	16	0	1	0	7	2	2	1	1	1	1
Private Helicopter	1,917	4	25	214	126	150	117	167	79	545	490
Commercial Helicopter	7,199	76	297	1,000	613	269	592	1,651	902	1,179	620
Commercial Helicopter, Private Glider	5	0	0	2	1	0	0	1	0	1	0
Commercial Helicopter, Commercial Glider	4	0	0	1	0	0	0	0	1	2	0
Commercial Gyroplane	1	0	0	0	1	0	0	0	0	0	0
Commercial Helicopter, Commercial Gyroplane	2	0	1	0	0	0	0	0	1	0	0
Airline Transport Helicopter	508	14	6	78	27	13	42	86	108	49	85
Glider only[6,7] **—Total**	**8,205**	**15**	**143**	**1,680**	**995**	**507**	**872**	**721**	**642**	**2,435**	**195**
Private Glider	7,090	10	123	1,424	852	421	734	628	553	2,176	169
Commercial Glider	1,115	5	20	256	143	86	138	93	89	259	26
Flight Instructor Certificates[8]	72,148	915	3,519	9,968	12,182	3,188	7,121	12,711	8,693	11,784	2,067
Instrument Ratings[8,9]	306,169	3,914	13,239	38,196	46,027	13,109	28,981	59,879	37,461	49,723	15,640

[1] Includes Outside U.S. total.

[2] Outside U.S. includes airmen certificated by the FAA who live outside the 50 states or foreign countries.

[3] Category of certificate unknown.

[4] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate.

[5] See table 7 for the total number of pilots with a helicopter certificate.

[6] See table 8 for the total number of pilots with a glider certificate.

[7] Glider pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination within the last 25 months.

[8] Not included in total.

[9] Special ratings shown on pilot certificates, do not indicate additional certificates.

Table 7.4
ESTIMATED ACTIVE PILOT CERTIFICATES HELD BY CLASS OF CERTIFICATE DECEMBER 31, 1983–1992

Class of Certificate	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
Total—All Pilots	**682,959**	**692,095**	**702,659**	**700,010**	**694,016**	**699,653**	**709,118**	**709,540**	**722,376**	**718,004**
Student[1]—Total	**114,597**	**120,203**	**128,663**	**142,544**	**136,913**	**146,016**	**150,273**	**146,652**	**150,081**	**147,197**
Recreational[1]	187	161	87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Airplane[2]										
Private—Total	**288,078**	**293,306**	**299,111**	**293,179**	**299,786**	**300,949**	**305,736**	**311,086**	**320,086**	**318,643**
Private Airplane (only)	276,713	282,047	288,035	282,540	289,318	290,694	295,607	301,021	310,207	309,216
Private Airplane, Private Glider	4,030	4,113	4,144	4,049	4,059	4,105	4,144	4,234	4,347	4,269
Private Airplane, Commercial Glider	893	878	841	807	799	795	772	767	754	716
Private Airplane, Private Gyroplane	28	20	22	31	26	29	25	29	30	31
Private Airplane, Private Helicopter	1,731	1,722	1,592	1,459	1,392	1,316	1,288	1,236	1,206	1,112
Private Airplane, Private Glider, Private Helicopter	68	71	67	58	60	55	47	48	48	47
Private Airplane, Commercial Helicopter	4,561	4,405	4,357	4,186	4,081	3,904	3,805	3,713	3,457	3,218
Private Airplane, Private Glider, Commercial Helicopter	37	35	36	30	32	37	33	21	21	19
Private Airplane, Commercial Glider, Commercial Helicopter	15	14	15	17	17	12	14	16	15	14
Private Airplane, Commercial Gyroplane, Commercial Helicopter	2	1	2	2	2	2	1	1	1	1
Commercial—Total	**146,385**	**148,365**	**149,666**	**144,540**	**143,030**	**143,645**	**147,798**	**151,632**	**155,929**	**159,495**
Commercial Airplane (only)	126,797	128,207	128,628	123,612	121,819	121,934	125,235	128,749	132,668	135,906
Commercial Airplane, Private Glider	2,055	2,072	2,081	2,057	2,063	2,070	2,148	2,164	2,186	2,158
Commercial Airplane, Commercial Glider	3,630	3,645	3,776	3,685	3,703	3,777	3,983	4,073	4,149	4,206
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	2	2	3	2	1	1	1	3	3
Commercial Airplane, Private Helicopter	401	379	348	325	302	274	262	245	248	241
Commercial Airplane, Commercial Glider, Private Helicopter	27	26	28	27	24	18	16	19	16	13
Commercial Airplane, Commercial Helicopter	12,767	13,316	14,036	14,085	14,346	14,778	15,335	15,550	15,817	16,142
Commercial Airplane, Private Glider, Commercial Helicopter	149	146	163	154	150	152	156	162	154	150
Commercial Airplane, Commercial Glider, Commercial Helicopter	509	518	543	535	562	587	609	614	632	625
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	18	19	20	19	22	20	23	25	25	20
Commercial Airplane, Commercial Gyroplane	20	25	31	27	24	24	21	23	24	23
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter, Commercial Glider	11	10	10	11	13	10	9	7	7	8
Airline Transport—Total	**115,855**	**112,167**	**107,732**	**102,087**	**96,968**	**91,287**	**87,186**	**82,740**	**79,192**	**75,938**
Airline Transport Airplane (only)	113,692	110,131	105,830	100,317	95,282	89,694	85,714	81,367	77,921	74,752
Airline Transport Airplane, Airline Transport Helicopter	2,163	2,036	1,902	1,770	1,686	1,593	1,472	1,373	1,271	1,186
Rotorcraft (only)[3]—Total	**9,652**	**9,860**	**9,567**	**8,863**	**8,608**	**8,702**	**8,581**	**8,123**	**7,532**	**7,237**
Private Gyroplane	16	15	11	12	15	10	9	5	6	8
Private Helicopter	1,917	1,864	1,572	1,264	1,143	1,019	892	808	712	615
Commercial Helicopter	7,199	7,469	7,524	7,116	6,997	7,228	7,230	6,862	6,415	6,286
Commercial Helicopter, Private Glider	5	7	4	6	7	5	6	5	2	3
Commercial Helicopter, Commercial Glider	4	2	3	2	4	5	6	9	9	7
Commercial Gyroplane	1	1	2	1	0	1	1	0	0	0
Commercial Helicopter, Commercial Gyroplane	2	2	2	1	2	1	2	2	1	2
Airline Transport Helicopter	508	500	449	461	440	433	435	432	387	316
Glider (only)[4,5]—Total	**8,206**	**8,033**	**7,833**	**7,708**	**7,600**	**7,901**	**8,411**	**8,168**	**8,390**	**8,157**
Private Glider	7,090	6,929	6,773	6,652	6,528	6,734	7,168	7,000	6,971	6,794
Commercial Glider	1,115	1,104	1,060	1,056	1,072	1,167	1,243	1,168	1,419	1,363
Lighter-Than-Air[5,6]	[6]	[6]	[6]	1,089	1,111	1,153	1,133	1,139	1,166	1,337
Flight Instructor Certificates[7]	**72,148**	**69,209**	**63,775**	**61,472**	**61,798**	**60,316**	**57,355**	**58,940**	**61,173**	**62,201**
Instrument Ratings[7,8]	**306,169**	**303,193**	**297,073**	**282,804**	**273,804**	**266,122**	**262,388**	**258,569**	**256,584**	**254,271**

[1] Category of certificate unknown.
[2] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate.
[3] See table 7 for the total number of pilots with a helicopter certificate.
[4] See table 8 for the total number of pilots with a glider certificate.
[5] *Glider and lighter-than-air pilots are not required to have a medical examination;* however, the totals above represent pilots who received a medical examination within the last 25 months.
[6] Lighter-than-air type ratings are no longer being issued.
[7] Not included in total.
[8] Special ratings shown on pilot certificates, do not indicate additional certificates.
N/A Not available. Recreational certificate first issued in 1990.

Table 7.5
ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE DECEMBER 31, 1992

FAA Region and State	Total Pilots	Students [1]	Airplane [2]			Misc. [3]	Flight Instructor [4]
			Private	Commercial	Airline Transport		
Total [5]	**682,959**	**114,597**	**288,078**	**146,385**	**115,855**	**18,044**	**72,148**
United States—Total	**653,235**	**109,241**	**281,754**	**136,447**	**109,148**	**16,645**	**70,081**
Alaskan Region—Total	**9,566**	**1,240**	**4,357**	**2,466**	**1,393**	**110**	**915**
Central Region—Total	**33,461**	**5,356**	**16,758**	**7,028**	**3,832**	**487**	**3,519**
Iowa	6,847	1,092	3,786	1,374	509	86	702
Kansas	9,126	1,364	4,636	1,993	1,011	122	957
Missouri	12,565	2,119	5,805	2,518	1,882	241	1,418
Nebraska	4,923	781	2,531	1,143	430	38	442
Eastern Region—Total	**87,768**	**16,819**	**36,953**	**17,621**	**13,364**	**3,011**	**9,968**
Delaware	1,671	291	675	348	315	42	223
District of Columbia	515	101	230	107	44	33	47
Maryland	9,768	1,830	4,291	1,921	1,422	304	1,062
New Jersey	13,660	2,609	5,828	2,495	2,266	462	1,595
New York	21,917	4,573	9,637	4,277	2,427	1,003	2,423
Pennsylvania	21,147	4,029	9,259	3,913	3,383	563	2,554
Virginia	15,553	2,636	5,500	3,762	3,188	467	1,753
West Virginia	2,510	510	1,230	475	227	68	231
Armed Forces Europe [6]	1,027	240	303	323	92	69	80
Great Lakes Region—Total	**111,713**	**19,521**	**53,571**	**22,165**	**14,636**	**1,820**	**12,182**
Illinois	25,056	4,323	11,107	4,934	4,246	446	3,021
Indiana	12,324	2,280	6,084	2,415	1,383	162	1,309
Michigan	19,081	3,445	9,558	3,608	2,068	402	2,063
Minnesota	16,739	2,790	7,697	3,433	2,609	210	1,770
North Dakota	3,267	512	1,540	1,031	162	22	330
Ohio	20,867	3,619	10,186	4,078	2,561	423	2,302
South Dakota	2,441	420	1,148	610	242	21	227
Wisconsin	11,938	2,132	6,251	2,056	1,365	134	1,160
New England Region—Total	**30,925**	**5,384**	**13,916**	**5,697**	**4,972**	**956**	**3,188**
Connecticut	8,001	1,276	3,298	1,426	1,750	251	831
Maine	3,689	697	1,753	793	390	56	327
Massachusetts	11,453	2,145	5,577	2,019	1,284	428	1,166
New Hampshire	4,535	678	1,793	826	1,131	107	533
Rhode Island	1,488	275	704	294	175	40	142
Vermont	1,759	313	791	339	242	74	189
Northwest Mountain Region—Total	**66,462**	**10,596**	**28,495**	**13,750**	**11,989**	**1,632**	**7,121**
Colorado	16,994	2,426	6,369	3,650	4,037	512	2,250
Idaho	4,579	773	2,250	950	515	91	414
Montana	3,833	592	1,893	929	365	54	381
Oregon	10,456	1,769	5,339	2,139	922	287	1,038
Utah	6,160	1,135	2,529	1,124	1,242	130	574
Washington	22,499	3,618	9,081	4,582	4,697	521	2,285
Wyoming	1,941	283	1,034	376	211	37	179
Southern Region—Total	**119,428**	**19,460**	**45,916**	**26,298**	**25,087**	**2,667**	**12,711**
Alabama	8,356	1,499	3,528	2,011	873	445	998
Florida	47,512	7,057	17,985	11,281	10,398	791	5,343
Georgia	18,198	2,799	6,273	3,504	5,281	341	1,711
Kentucky	6,364	1,207	2,554	1,093	1,343	167	629
Mississippi	4,471	838	1,752	1,322	467	92	417
North Carolina	14,998	2,534	6,150	3,004	2,936	374	1,441
South Carolina	6,666	1,262	2,752	1,590	927	135	646
Tennessee	12,738	2,244	4,890	2,450	2,850	304	1,515
Armed Forces Europe [6]	125	20	32	43	12	18	11

Table 7.5—Continued
ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE DECEMBER 31, 1992

FAA Region and State	Total Pilots	Students [1]	Airplane[2]			Misc.[3]	Flight Instructor[4]
			Private	Commercial	Airline Transport		
Southwest Region—Total	**78,367**	**12,243**	**31,262**	**17,964**	**15,155**	**1,743**	**8,693**
Arkansas	5,758	1,047	2,529	1,488	606	88	559
Louisiana	7,341	1,204	2,753	2,106	982	296	800
New Mexico	4,746	714	2,084	1,163	652	133	544
Oklahoma	10,328	1,864	4,897	2,299	1,137	131	1,124
Texas	50,194	7,414	18,999	10,908	11,778	1,095	5,666
Western-Pacific Region—Total	**115,545**	**18,622**	**50,526**	**23,458**	**18,720**	**4,219**	**11,784**
Arizona	15,883	2,647	6,234	3,421	3,056	525	1,994
California	90,035	14,507	41,010	18,052	13,229	3,237	8,742
Hawaii	3,293	532	872	708	924	257	388
Nevada	5,626	707	2,217	1,084	1,452	166	611
Armed Forces Pacific[6]	708	229	193	193	59	34	49
Outside U. S.—Total[7]	**29,724**	**5,356**	**6,324**	**9,938**	**6,707**	**1,399**	**2,067**
Other U. S. Areas:	2,161	590	662	390	447	72	294
American Samoa	12	2	1	3	4	2	18
Guam	218	35	37	36	106	4	276
Puerto Rico	1,614	469	515	293	277	60	0
Virgin Islands	313	84	107	57	59	6	0
Wake Island	4	0	2	1	1	0	0

[1] Category of certificate unknown.
[2] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate
[3] Includes helicopter, glider, and recreational.
[4] Not included in total.
[5] Includes Outside U.S.
[6] Military personnel holding civilian certificate stationed in foreign country.
[7] Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

Table 7.6
ESTIMATED ACTIVE WOMEN PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE DECEMBER 31, 1992

FAA Region and State	Total Pilots	Students [1]	Airplane [2]			Misc. [3]	Flight Instructor [4]
			Private	Commercial	Airline Transport		
Total[5]	**40,620**	**13,921**	**17,276**	**5,918**	**2,530**	**975**	**3,964**
United States—Total	**39,406**	**13,552**	**16,852**	**5,619**	**2,463**	**920**	**3,870**
Alaskan Region—Total	**693**	**204**	**356**	**101**	**27**	**5**	**66**
Central Region—Total	**1,823**	**673**	**856**	**204**	**67**	**23**	**138**
Iowa	327	133	156	31	7	0	18
Kansas	504	155	257	59	24	9	42
Missouri	753	296	335	78	32	12	57
Nebraska	239	89	108	36	4	2	21
Eastern Region—Total	**5,403**	**1,950**	**2,208**	**753**	**313**	**179**	**526**
Delaware	91	22	38	19	7	5	12
District of Columbia	52	20	21	4	6	1	4
Maryland	710	250	322	79	37	22	52
New Jersey	830	296	341	126	44	23	88
New York	1,348	497	523	181	73	74	123
Pennsylvania	1,324	486	553	192	69	24	141
Virginia	860	303	334	127	72	24	98
West Virginia	134	56	54	17	3	4	5
Armed Forces Europe [6]	54	20	22	8	2	2	3
Great Lakes Region—Total	**6,799**	**2,405**	**2,903**	**1,043**	**345**	**103**	**690**
Illinois	1,618	536	650	298	110	24	195
Indiana	658	231	280	106	34	7	64
Michigan	1,164	415	501	160	53	35	118
Minnesota	1,066	370	458	162	61	15	115
North Dakota	169	55	70	43	1	0	19
Ohio	1,305	476	567	186	59	17	127
South Dakota	110	49	47	10	4	0	4
Wisconsin	709	273	330	78	23	5	48
New England Region—Total	**1,992**	**669**	**881**	**272**	**116**	**54**	**190**
Connecticut	491	160	201	72	41	17	54
Maine	199	76	93	21	6	3	11
Massachusetts	766	263	353	96	39	15	66
New Hampshire	291	81	123	58	18	11	42
Rhode Island	110	43	49	12	4	2	6
Vermont	135	46	62	13	8	6	11
Northwest Mountain Region—Total	**4,506**	**1,512**	**1,893**	**690**	**295**	**116**	**478**
Colorado	1,222	371	462	243	110	36	170
Idaho	275	102	121	34	12	6	29
Montana	223	81	109	23	10	0	18
Oregon	735	258	337	89	27	24	65
Utah	296	134	92	44	18	8	25
Washington	1,625	524	703	246	111	41	166
Wyoming	130	42	69	11	7	1	5
Southern Region—Total	**6,249**	**2,290**	**2,464**	**894**	**506**	**95**	**594**
Alabama	372	146	158	46	8	14	20
Florida	2,813	890	1,208	462	214	39	299
Georgia	788	345	274	94	68	7	66
Kentucky	302	132	97	33	38	2	25
Mississippi	177	88	58	20	9	2	18
North Carolina	793	270	328	110	71	14	75
South Carolina	328	142	112	43	23	8	29
Tennessee	672	276	228	84	75	9	62
Armed Forces Europe [6]	4	1	1	2	0	0	0

Table 7.6—Continued
ESTIMATED ACTIVE WOMEN PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE DECEMBER 31, 1992

FAA Region and State	Total Pilots	Students [1]	Airplane [2]			Misc. [3]	Flight Instructor [4]
			Private	Commercial	Airline Transport		
Southwest Region—Total	**4,013**	**1,407**	**1,711**	**547**	**265**	**83**	**394**
Arkansas	237	81	110	39	7	0	18
Louisiana	295	119	105	47	16	8	33
New Mexico	300	89	134	43	20	14	40
Oklahoma	618	221	288	75	29	5	60
Texas	2,563	897	1,074	343	193	56	243
Western-Pacific Region—Total	**7,928**	**2,442**	**3,580**	**1,115**	**529**	**262**	**794**
Arizona	1,074	308	488	172	76	30	115
California	6,194	1,911	2,840	852	385	206	611
Hawaii	230	72	70	39	32	17	30
Nevada	370	111	167	49	35	8	37
Armed Forces Pacific [6]	60	40	15	3	1	1	1
Outside U. S.—Total [7]	**1,214**	**369**	**424**	**299**	**67**	**55**	**94**
Other U. S. Areas:	101	53	21	14	6	7	0
Guam	14	4	5	3	2	0	0
Puerto Rico	62	36	10	8	2	6	0
Virgin Islands	25	13	6	3	2	1	0

[1] Category of certificate unknown.
[2] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate
[3] Includes helicopter, glider, and recreational pilots.
[4] Not included in total.
[5] Includes Outside U.S.
[6] Military personnel holding civilian certificate stationed in foreign country.
[7] Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

TABLE 7.7
ESTIMATED ACTIVE HELICOPTER PILOTS BY CLASS OF CERTIFICATE
DECEMBER 31, 1983–1992

Class of Certificate	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
TOTAL	**32,158**	**32,605**	**32,741**	**31,802**	**31,349**	**31,513**	**31,697**	**31,206**	**30,507**	**30,090**
Private—Total	**4,188**	**4,097**	**3,640**	**3,176**	**2,982**	**2,721**	**2,539**	**2,360**	**2,266**	**2,067**
Private Helicopter	1,917	1,864	1,572	1,264	1,143	1,019	892	808	712	615
Private Helicopter, Private Airplane	1,731	1,722	1,592	1,459	1,392	1,316	1,288	1,236	1,206	1,112
Private Helicopter, Private Airplane, Private Glider	68	71	67	58	60	55	47	48	48	47
Private Helicopter, Commercial Airplane	401	379	348	325	302	274	262	245	248	241
Private Helicopter, Commercial Airplane, Commercial Glider	27	26	28	27	24	18	16	19	16	13
Private Gyroplane	16	15	11	12	15	10	9	5	6	8
Private Gyroplane, Private Airplane	28	20	22	31	26	29	25	29	30	31
Commercial—Total	**25,299**	**25,972**	**26,750**	**26,195**	**26,261**	**26,766**	**27,251**	**27,011**	**26,583**	**26,521**
Commercial Helicopter	7,199	7,469	7,524	7,116	6,997	7,228	7,230	6,862	6,415	6,286
Commercial Helicopter, Private Airplane	4,561	4,405	4,357	4,186	4,061	3,904	3,805	3,713	3,457	3,218
Commercial Helicopter, Private Glider	5	7	4	6	7	5	6	5	2	3
Commercial Helicopter, Commercial Glider	4	2	3	2	4	5	6	9	9	7
Commercial Helicopter, Private Airplane, Commercial Gyroplane	2	1	2	2	2	2	1	1	1	1
Commercial Helicopter, Private Airplane, Private Glider	37	35	36	30	32	37	33	21	21	19
Commercial Helicopter, Private Airplane, Commercial Glider	15	14	15	17	17	12	14	16	15	14
Commercial Helicopter, Commercial Airplane	12,767	13,316	14,036	14,085	14,346	14,778	15,335	15,550	15,817	16,142
Commercial Helicopter, Commercial Airplane, Private Glider	149	146	163	154	150	152	156	162	154	150
Commercial Helicopter, Commercial Airplane, Commercial Glider	509	518	543	535	562	587	609	614	632	625
Commercial Gyroplane	1	1	2	1	0					
Commercial Helicopter, Commercial Airplane, Commercial Gyroplane	18	19	20	19	22	20	23	25	25	20
Commercial Helicopter, Commercial Airplane, Commercial Gyroplane, Commercial Glider	11	10	10	11	13	10	9	7	7	8
Commercial Helicopter, Commercial Gyroplane		2	2	1	2	1	2	2	1	2
Commercial Gyroplane, Commercial Airplane	20	25	31	27	24	24	21	23	24	23
Commercial Gyroplane, Commercial Airplane, Commercial Glider	1	2	2	3	2	1	1	1	3	3
Airline Transport—Total	**2,671**	**2,536**	**2,351**	**2,231**	**2,126**	**2,026**	**1,907**	**1,806**	**1,658**	**1,502**
Airline Transport Helicopter	508	500	449	461	440	433	435	432	387	316
Airline Transport Helicopter, Airline Transport Airplane	2,163	2,036	1,902	1,770	1,686	1,593	1,472	1,373	1,271	1,186

Table 7.8
ESTIMATED ACTIVE GLIDER PILOTS BY CLASS OF CERTIFICATE
DECEMBER 31, 1983–1992

Class of Certificate	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
Total	**19,639**	**19,570**	**19,546**	**19,149**	**19,086**	**19,530**	**20,366**	**20,308**	**20,733**	**20,395**
Private—Total	**13,434**	**13,370**	**13,288**	**13,006**	**12,886**	**13,158**	**13,702**	**13,634**	**13,729**	**13,440**
Private Glider	7,090	6,929	6,773	6,652	6,528	6,734	7,168	7,000	6,971	6,794
Private Glider, Private Airplane	4,030	4,113	4,144	4,049	4,059	4,105	4,144	4,234	4,347	4,269
Private Glider, Private Airplane, Private Helicopter	68	71	67	58	60	55	47	48	48	47
Private Glider, Private Airplane, Commercial Helicopter	37	35	36	30	32	37	33	21	21	19
Private Glider, Commercial Airplane	2,055	2,072	2,081	2,057	2,063	2,070	2,148	2,164	2,186	2,158
Private Glider, Commercial Airplane, Commercial Helicopter	149	146	163	154	150	152	156	162	154	150
Private Glider, Commercial Helicopter	5	4	4	6	7	5	6	5	2	3
Commercial—Total	**6,205**	**6,200**	**6,278**	**6,143**	**6,198**	**6,372**	**6,663**	**6,674**	**7,004**	**6,955**
Commercial Glider	1,115	1,104	1,060	1,056	1,072	1,167	1,243	1,168	1,419	1,363
Commercial Glider, Commercial Airplane	3,630	3,645	3,776	3,685	3,703	3,777	3,983	4,073	4,149	4,206
Commercial Glider, Private Airplane	893	878	841	807	799	795	772	767	754	716
Commercial Glider, Private Airplane, Commercial Helicopter	15	14	15	17	17	12	14	16	15	14
Commercial Glider, Commercial Helicopter	4	3	3	2	4	5	6	9	9	7
Commercial Glider, Commercial Airplane, Private Helicopter	27	26	28	27	24	18	16	19	16	13
Commercial Glider, Commercial Airplane, Commercial Helicopter	509	518	543	535	562	587	609	614	632	625
Commercial Glider, Commercial Airplane, Commercial Gyroplane	1	2	2	3	2	1	1	1	3	3
Commercial Glider, Commercial Airplane, Commercial Gyroplane, Commercial Helicopter	11	10	10	11	13	10	9	7	7	8

Table 7.9
ESTIMATED INSTRUMENT RATINGS HELD BY CLASS OF CERTIFICATE BY FAA REGION DECEMBER 31, 1992

Class of Certificate	Total[1]	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	South-west	Western Pacific	Outside U.S.[2]
Total—All Pilots	**306,169**	**3,914**	**13,239**	**38,196**	**46,027**	**13,109**	**28,981**	**59,879**	**37,461**	**49,723**	**15,640**
Airplane											
Private—Total	**56,199**	**368**	**3,123**	**7,791**	**10,843**	**2,830**	**4,541**	**9,824**	**6,070**	**10,054**	**755**
Private Airplane (only)	51,753	305	2,888	7,114	10,295	2,631	4,155	8,853	5,540	9,290	682
Private Airplane, Private Glider	1,096	7	37	178	172	60	67	186	96	262	11
Private Airplane, Commercial Glider	131	1	2	20	22	15	19	10	15	25	2
Private Airplane, Private Helicopter	470	1	18	65	57	32	46	82	59	101	9
Private Airplane, Private Glider, Private Helicopter	28	0	0	4	5	2	3	4	1	7	2
Private Airplane, Commercial Helicopter	2,688	54	176	404	289	88	229	679	355	365	49
Private Airplane, Private Gyroplane	4	0	1	0	2	1	0	0	0	0	0
Private Airplane, Private Glider, Commercial Helicopter	19	0	1	4	0	0	2	7	2	3	0
Private Airplane, Commercial Glider, Commercial Helicopter	9	0	0	2	0	1	0	3	2	1	
Private Airplane, Other	1	0	0	0	1	0	0	0	0	0	0
Commercial—Total	**128,828**	**2,086**	**6,017**	**16,213**	**20,025**	**5,101**	**12,016**	**23,516**	**15,480**	**20,296**	**8,079**
Commercial Airplane (only)	111,350	1,814	5,231	13,737	18,030	4,443	10,242	19,786	13,322	17,020	7,725
Commercial Airplane, Private Glider	1,795	26	77	272	277	67	177	325	196	355	23
Commercial Airplane, Commercial Glider	3,036	26	125	473	423	174	393	469	333	590	30
Commercial Airplane, Private Helicopter	365	2	20	56	47	17	29	65	33	78	18
Commercial Airplane, Commercial Helicopter	11,612	207	532	1,580	1,179	366	1,100	2,753	1,527	2,096	272
Commercial Airplane, Private Glider, Commercial Helicopter	132	2	5	21	17	7	18	26	11	22	3
Commercial Airplane, Commercial Glider, Commercial Helicopter	468	7	22	68	39	25	51	83	51	117	5
Commercial Airplane, Commercial Gyroplane	17	1	3	0	5	1	2	2	1	2	0
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	17	0	1	1	1	0	2	3	1	6	2
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	0	0	0	0	0	0	0	0	1	0
Commercial Airplane, Commercial Glider, Private Helicopter	25	0	0	5	6	1	1	2	3	6	1
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter, Commercial Glider	10	0	1	0	1	0	1	2	2	3	0
Airline Transport—Total	**115,855**	**1,393**	**3,832**	**13,364**	**14,636**	**4,972**	**11,989**	**25,087**	**15,155**	**18,720**	**6,707**
Airline Transport Airplane (only)	113,692	1,328	3,786	12,991	14,452	4,846	11,802	24,629	14,815	18,409	6,634
Airline Transport Airplane, Airline Transport Helicopter	2,163	65	46	373	184	126	187	458	340	311	73
Rotorcraft (only)—Total	**5,287**	**68**	**267**	**828**	**523**	**206**	**435**	**1,452**	**756**	**653**	**99**
Commercial Helicopter	5,214	67	266	818	515	202	427	1,439	742	642	96
Airline Transport Helicopter	58	1	1	8	5	3	8	11	12	6	3
Other	15	0	0	2	3	1	0	2	2	5	0

[1] Includes Outside U.S. total.
[2] Outside U.S. includes airmen certificated by FAA who live outside the 50 states or foreign countries.

Table 7.10
ESTIMATED INSTRUMENT RATINGS HELD BY CLASS OF CERTIFICATE DECEMBER 31, 1983 - 1992

Class of Certificate	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total—All Pilots	**254,271**	**256,584**	**258,559**	**262,388**	**266,122**	**273,804**	**282,804**	**297,073**	**303,193**	**306,169**
Airplane										
Private —Total	**41,951**	**43,312**	**43,902**	**45,672**	**47,746**	**49,381**	**51,067**	**53,920**	**55,557**	**56,199**
Private Airplane (only)	38,836	39,962	40,330	41,947	43,885	45,316	46,859	49,550	51,215	51,753
Private Airplane, Private Glider	921	964	954	955	983	1,007	1,023	1,069	1,103	1,096
Private Airplane, Commercial Glider	86	82	85	95	102	108	119	122	134	131
Private Airplane, Private Helicopter	267	295	313	318	332	356	403	432	451	470
Private Airplane, Private Glider, Private Helicopter	19	17	16	20	25	25	27	32	31	28
Private Airplane, Commercial Helicopter	1,797	1,968	2,180	2,302	2,385	2,537	2,606	2,683	2,594	2,688
Private Airplane, Private Gyroplane	4	3	2	2	3	3	5	5	3	4
Private Airplane, Private Glider, Commercial Helicopter	10	10	11	20	21	15	12	16	16	19
Private Airplane, Commercial Glider, Commercial Helicopter	10	10	10	12	9	13	12	10	9	9
Private Airplane, Other	1	1	1	1	1	1	1	1	1	1
Commercial Pilots—Total	**131,445**	**128,978**	**126,352**	**123,559**	**121,072**	**121,674**	**123,908**	**129,426**	**129,774**	**128,828**
Commercial Airplane (only)	111,188	108,916	106,522	103,913	102,017	102,982	105,402	110,719	111,835	111,350
Commercial Airplane, Private Glider	1,823	1,833	1,826	1,825	1,756	1,778	1,783	1,825	1,802	1,795
Commercial Airplane, Commercial Glider	3,360	3,355	3,318	3,227	3,098	3,033	3,037	3,141	3,048	3,036
Commercial Airplane, Private Helicopter	188	203	208	224	234	264	282	307	336	365
Commercial Airplane, Commercial Helicopter	14,139	13,913	13,723	13,624	13,250	12,911	12,708	12,716	12,079	11,612
Commercial Airplane, Private Glider, Commercial Helicopter	138	141	151	143	134	132	136	145	130	132
Commercial Airplane, Commercial Glider, Commercial Helicopter	558	561	549	549	526	506	488	496	474	468
Commercial Airplane, Commercial Gyroplane	14	14	14	13	15	15	19	22	18	17
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	16	20	18	16	15	18	16	17	16	17
Commercial Airplane, Commercial Gyroplane, Commercial Glider	2	2	1	1	1	1	2	2	2	1
Commercial Airplane, Commercial Glider, Private Helicopter	12	13	15	15	16	21	24	27	25	25
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter.										
Commercial Glider	7	7	7	9	10	13	11	9	9	10
Airline Transport—Total	**75,938**	**79,192**	**82,740**	**87,186**	**91,287**	**96,968**	**102,067**	**107,732**	**112,167**	**115,855**
Airline Transport Airplane (only)	74,752	77,921	81,367	85,714	89,694	95,282	100,317	105,830	110,131	113,692
Airline Transport Airplane, Airline Transport Helicopter	1,186	1,271	1,373	1,472	1,593	1,686	1,770	1,902	2,036	2,163
Rotorcraft (only)—Total	**4,937**	**5,102**	**5,565**	**5,971**	**6,017**	**5,781**	**5,742**	**5,995**	**5,695**	**5,287**
Commercial Helicopter	4,864	5,016	5,472	5,873	5,927	5,695	5,660	5,923	5,624	5,214
Airline Transport Helicopter	60	73	82	89	81	75	71	62	59	58
Other	13	13	11	9	9	11	11	10	12	15

Table 7.11
ESTIMATED TOTAL PILOTS AND INSTRUMENT RATED PILOTS
DECEMBER 31, 1983–1992

Calendar Year	Total Number [1]	Instrument Rated Pilots	
		Number	Percent of Total
1992	568,362	306,169	54%
1991	571,892	303,193	53%
1990	574,208	297,073	52%
1989	557,466	282,804	51%
1988	557,103	273,804	49%
1987	553,637	266,122	48%
1986	558,845	262,388	47%
1985	562,888	258,559	46%
1984	572,295	256,584	45%
1983	570,807	254,271	45%

[1] Excludes student pilots.

Table 7.12
ESTIMATED ACTIVE PILOT CERTIFICATES HELD BY CATEGORY AND AGE GROUP OF HOLDER DECEMBER 31,1992

Age Group	Type of Pilot Certificate								
	Total	Student [1]	Recreational	Airplane [2]			Helicopter (Only)	Glider (Only) [3]	Flight Instructor [4]
				Private	Commercial	Airline Transport			
Total	**682,959**	**114,597**	**191**	**288,078**	**146,385**	**115,855**	**9,652**	**8,201**	**72,148**
14-15	30	30	0	0	0	0	0	0	0
16-19	16,793	12,142	4	4,251	272	0	44	80	79
20-24	55,416	19,890	9	21,285	12,654	413	937	228	6,272
25-29	74,780	19,142	11	24,480	21,985	6,372	2,374	416	10,925
30-34	88,511	17,805	18	33,498	17,698	16,853	1,889	750	9,769
35-39	94,149	15,208	37	41,786	15,493	18,960	1,369	1,296	9,074
40-44	90,190	11,485	19	41,485	15,311	19,099	1,413	1,378	8,876
45-49	84,429	7,979	24	36,424	17,872	19,930	1,031	1,169	9,063
50-54	62,234	4,731	17	27,337	13,708	15,361	357	723	6,448
55-59	45,355	2,766	14	20,355	11,040	10,492	145	543	4,751
60 and over	71,072	3,419	38	37,177	20,352	8,375	93	1,618	6,891

[1] Category of certificate unknown.
[2] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate
[3] Glider pilots are not required to have a medical examination; however, totals above represent pilots who received a medical examination.
[4] Not included in total active pilots.

Table 7.13
AVERAGE AGE OF ACTIVE PILOTS BY CATEGORY DECEMBER 31, 1983–1992

Calendar Year	Type of Pilot Certificate					
	Total [1]	Student [2]	Recreational [2]	Airplane [3]		
				Private	Commercial	Airline Transport
1983	38.8	31.7	N/A	40.0	41.5	42.5
1984	39.2	32.1	N/A	40.4	42.0	42.7
1985	39.5	32.4	N/A	40.8	42.4	42.8
1986	39.7	32.2	N/A	41.1	42.6	43.0
1987	39.9	32.3	N/A	41.4	42.7	43.1
1988	40.1	32.5	N/A	41.4	42.6	43.2
1989	40.2	32.7	N/A	41.8	42.5	43.4
1990	40.5	32.5	41.7	42.0	42.2	43.6
1991	40.5	32.6	43.5	42.0	41.8	43.7
1992	40.8	32.9	44.4	42.2	41.7	43.8

[1] Includes helicopter (only) and glider (only) not shown separately.
[2] Category of certificate unknown.
[3] Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate
N/A Not available. Recreational certificate first issued in 1990.

Table 7.14
NONPILOT AIRMEN CERTIFICATES HELD BY FAA REGION AND STATE DECEMBER 31, 1992 [1]

FAA Region and State	Total	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Total [2]	**540,548**	**384,669**	**8,163**	**73,276**	**12,264**	**1,154**	**61,022**
United States—Total	**516,072**	**367,698**	**7,970**	**70,931**	**9,898**	**1,133**	**58,442**
Alaskan Region—Total	**5,566**	**3,805**	**117**	**883**	**240**	**8**	**513**
Central Region—Total	**25,488**	**19,951**	**385**	**3,540**	**174**	**5**	**1,433**
Iowa	3,136	2,358	85	568	13	0	112
Kansas	7,138	5,616	99	1,057	43	1	322
Missouri	12,963	10,304	138	1,540	107	3	871
Nebraska	2,251	1,673	63	375	11	1	128
Eastern Region—Total	**72,202**	**52,608**	**1,253**	**9,791**	**2,255**	**180**	**6,115**
Delaware	1,391	1,006	21	164	20	4	176
District of Columbia	360	221	17	85	18	0	19
Maryland	4,916	3,077	111	954	80	12	682
New Jersey	11,770	8,443	185	1,476	350	46	1,270
New York	25,987	20,746	242	2,744	1,224	47	984
Pennsylvania	17,427	12,903	307	2,446	382	37	1,352
Virginia	8,459	4,805	300	1,605	171	34	1,544
West Virginia	1,244	880	42	245	6	0	71
Armed Forces Europe [3]	648	527	28	72	4	0	17
Great Lakes Region—Total	**70,166**	**49,180**	**1,062**	**11,241**	**1,306**	**31**	**7,346**
Illinois	18,406	12,264	246	2,875	394	12	2,615
Indiana	7,176	5,129	152	1,138	85	3	669
Michigan	11,039	7,888	163	2,124	120	4	740
Minnesota	12,636	8,928	113	1,412	461	3	1,719
North Dakota	1,265	1,019	19	173	7	1	46
Ohio	12,921	9,269	237	2,284	162	6	963
South Dakota	1,145	823	16	221	6	0	79
Wisconsin	5,578	3,860	116	1,014	71	2	515
New England Region—Total	**21,251**	**14,813**	**277**	**3,080**	**308**	**134**	**2,639**
Connecticut	6,410	4,374	68	840	95	89	944
Maine	1,548	1,015	39	278	35	7	174
Massachusetts	9,197	7,144	123	1,199	113	14	604
New Hampshire	2,454	1,201	25	443	36	19	730
Rhode Island	886	621	12	161	12	1	79
Vermont	756	458	10	159	17	4	108
Northwest Mountain Region—Total	**47,153**	**30,827**	**1,169**	**6,902**	**620**	**136**	**7,499**
Colorado	14,430	8,974	139	2,218	230	27	2,842
Idaho	1,992	1,316	177	338	15	7	139
Montana	2,249	1,498	243	374	8	4	122
Oregon	5,017	3,567	199	856	54	18	323
Utah	3,832	2,347	74	526	28	7	850
Washington	18,329	12,140	307	2,410	274	70	3,128
Wyoming	1,304	985	30	180	11	3	95
Southern Region—Total	**98,054**	**66,118**	**1,511**	**13,138**	**2,283**	**246**	**14,758**
Alabama	6,921	5,516	110	1,038	14	9	234
Florida	43,597	29,718	488	5,932	1,330	184	5,945
Georgia	20,225	13,743	208	1,746	372	16	4,140
Kentucky	3,989	2,307	133	604	123	0	822
Mississippi	2,191	1,574	31	400	13	5	168
North Carolina	9,522	6,096	313	1,470	157	21	1,465
South Carolina	3,684	2,472	76	662	28	3	443
Tennessee	7,872	4,650	149	1,278	246	8	1,541
Armed Forces Europe [3]	53	42	3	8	0	0	0
Southwest Region—Total	**75,236**	**55,515**	**882**	**9,456**	**1,130**	**71**	**8,182**
Arkansas	3,121	2,309	65	521	23	1	202
Louisiana	5,377	4,156	78	716	46	7	374
New Mexico	2,683	1,870	61	562	31	5	154
Oklahoma	16,981	14,868	154	1,519	34	4	402
Texas	47,074	32,312	524	6,138	996	54	7,050

Table 7.14—Continued
NONPILOT AIRMEN CERTIFICATES HELD BY FAA REGION AND STATE DECEMBER 31, 1992 [1]

FAA Region and State	Total	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Western-Pacific Region—Total	**100,956**	**74,881**	**1,314**	**12,900**	**1,582**	**322**	**9,957**
Arizona	12,150	8,698	166	1,958	271	21	1,036
California	81,123	61,116	1,020	9,849	1,088	240	7,810
Hawaii	3,711	2,712	34	415	154	7	389
Nevada	3,517	1,999	60	632	58	54	714
Armed Forces Pacific [3]	455	356	34	46	11	0	8
Outside U. S.—Total [4]	**24,476**	**16,971**	**193**	**2,345**	**2,366**	**21**	**2,580**
Other U. S. Areas:	1,890	1,401	35	237	86	0	131
American Samoa	18	12	0	5	0	0	1
Canal Zone	36	13	18	3	2	0	0
Guam	276	152	3	31	8	0	82
Puerto Rico	1,398	1,107	12	168	73	0	38
Virgin Islands	153	108	2	30	3	0	10
Wake Island	9	9	0	0	0	0	0

[1] Data for flight engineers and flight navigators represent total active ratings held; i.e., those with a valid medical certificate. Data for dispatchers, mechanics, parachute riggers and ground instructors represent total ratings issued to date; *no medical examination required.*
[2] Includes Outside U. S.
[3] Military personnel holding civilian certificate stationed in foreign country.
[4] Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

Table 7.15
WOMEN NONPILOT CERTIFICATES HELD BY FAA REGION AND STATE DECEMBER 31, 1992[1]

FAA Region and State	Total	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Total[2]	**11,514**	**4,398**	**390**	**4,338**	**1,004**	**0**	**1,384**
United States—Total	**11,271**	**4,369**	**378**	**4,230**	**932**	**0**	**1,362**
Alaskan Region—Total	**187**	**50**	**6**	**59**	**56**	**0**	**16**
Central Region—Total	**474**	**247**	**13**	**183**	**8**	**0**	**23**
Iowa	86	46	0	34	3	0	3
Kansas	176	104	5	59	0	0	8
Missouri	168	82	5	65	5	0	11
Nebraska	44	15	3	25	0	0	1
Eastern Region—Total	**1,355**	**379**	**75**	**548**	**194**	**0**	**159**
Delaware	34	14	1	11	3	0	5
District of Columbia	11	1	1	5	1	0	3
Maryland	120	25	2	61	12	0	20
New Jersey	181	50	8	66	34	0	23
New York	421	131	14	155	90	0	31
Pennsylvania	328	83	25	142	46	0	32
Virginia	217	53	21	93	7	0	43
West Virginia	29	18	0	10	1	0	0
Armed Forces Europe[3]	14	4	3	5	0	0	2
Great Lakes Region—Total	**1,795**	**657**	**52**	**712**	**147**	**0**	**227**
Illinois	523	183	13	197	32	0	98
Indiana	188	54	16	70	10	0	38
Michigan	278	85	6	151	16	0	20
Minnesota	276	119	3	67	52	0	35
North Dakota	17	5	0	10	1	0	1
Ohio	348	167	10	131	23	0	17
South Dakota	28	9	0	16	2	0	1
Wisconsin	137	35	4	70	11	0	17
New England Region—Total	**455**	**160**	**14**	**196**	**24**	**0**	**61**
Connecticut	157	70	3	49	13	0	22
Maine	41	10	2	20	3	0	6
Massachusetts	165	52	7	83	6	0	17
New Hampshire	64	21	1	28	2	0	12
Rhode Island	12	5	0	6	0	0	1
Vermont	16	2	1	10	0	0	3
Northwest Mountain Region—Total	**1,211**	**467**	**28**	**451**	**58**	**0**	**207**
Colorado	422	152	0	152	16	0	102
Idaho	39	11	2	21	4	0	1
Montana	38	7	4	23	2	0	2
Oregon	124	34	7	73	3	0	7
Utah	80	33	6	28	3	0	10
Washington	468	213	7	141	28	0	79
Wyoming	40	17	2	13	2	0	6
Southern Region—Total	**1,993**	**652**	**99**	**765**	**183**	**0**	**294**
Alabama	174	72	4	94	1	0	3
Florida	875	283	25	328	108	0	131
Georgia	232	99	6	72	16	0	39
Kentucky	125	29	6	40	22	0	28
Mississippi	38	14	1	19	1	0	3
North Carolina	227	63	25	102	8	0	29
South Carolina	82	31	2	37	3	0	9
Tennessee	239	60	30	73	24	0	52
Armed Forces Europe[3]	1	1	0	0	0	0	0
Southwest Region—Total	**1,517**	**695**	**45**	**525**	**128**	**0**	**124**
Arkansas	52	21	1	23	2	0	5
Louisiana	108	52	2	40	8	0	6
New Mexico	77	23	2	45	2	0	5
Oklahoma	324	215	8	92	1	0	8
Texas	956	384	32	325	115	0	100

Table 7.15—Continued
WOMEN NONPILOT CERTIFICATES HELD BY FAA REGION AND STATE DECEMBER 31, 1992 [1]

FAA Region and State	Total	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Western-Pacific Region—Total	**2,284**	**1,062**	**46**	**791**	**134**	**0**	**251**
Arizona	303	126	4	125	24	0	24
California	1,807	889	37	601	80	0	200
Hawaii	98	26	0	36	23	0	13
Nevada	70	20	2	28	6	0	14
Armed Forces Pacific [3]	6	1	3	1	1	0	0
Outside U. S. —Total [4]	**243**	**29**	**12**	**108**	**72**	**0**	**22**
Other U. S. Areas:	25	11	0	11	1	0	2
American Samoa	0	0	0	0	0	0	0
Canal Zone	0	0	0	0	0	0	0
Guam	5	3	0	0	0	0	2
Puerto Rico	15	5	0	9	1	0	0
Virgin Islands	5	3	0	2	0	0	0
Wake Island	0	0	0	0	0	0	0

[1] Data for flight engineers and flight navigators represent total active ratings held; i.e., those with a valid medical certificate. Data for dispatchers, mechanics, parachute riggers and ground instructors represent total ratings issued to date; no medical examination required.
[2] Includes Outside U. S.
[3] Military personnel holding civilian certificate stationed in foreign country.
[4] Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

TABLE 7.16
PILOT CERTIFICATES ISSUED BY CATEGORY AND CONDUCTOR
DECEMBER 31, 1992

Category of Certificate	Total Ratings Issued	Original Issuances				Additional Ratings			
		Total	Examiner	Inspector	No Test	Total	Examiner	Inspector	No Test
Pilot—Total	**188,292**	**143,532**	**129,289**	**670**	**13,573**	**44,760**	**39,253**	**1,321**	**4,186**
Student	78,377	78,377	78,377	0	0	N/AP	N/AP	N/AP	N/AP
Recreational	74	74	65	4	5	0	0	0	0
Airplane									
Private	59,384	39,968	31,862	193	7,913	19,416	17,295	138	1,983
Commercial	25,984	14,354	10,207	31	4,116	11,630	9,625	173	1,832
Airline Transport	21,090	7,699	6,811	367	521	13,391	12,078	998	315
Helicopter (only)	2,975	2,684	1,616	61	1,007	291	226	12	53
Glider (only)	408	376	351	14	11	32	29	0	3
Nonpilot—Total	**34,810**	**27,543**	**20,253**	**426**	**6,864**	**7,267**	**5,791**	**67**	**1,409**
Mechanic	27,031	20,532	17,373	27	3,132	6,499	5,639	15	845
Parachute Rigger	254	232	134	14	84	22	12	1	9
Ground Instructor	4,026	3,508	355	15	3,138	518	59	3	456
Dispatcher	674	674	498	130	46	0	0	0	0
Flight Navigator	2	2	1	0	1	0	0	0	
Flight Engineer	2,823	2,595	1,892	240	463	228	81	48	99
Flight Instructor Certificates*	**15,312**	**7,151**	**5,488**	**1,429**	**234**	**8,161**	**7,854**	**288**	**19**

Note: Additional ratings are entered on current airman certificates as follows:
Private, commercial, and airline transport pilot—aircraft category, class, and type instrument rating.
Helicopter pilot—instrument and type ratings.
Flight instructor—ratings for each aircraft category in which the holder is qualified, and for instrument flying instructions.
Mechanic—airframe and powerplant ratings.
Parachute rigger—senior or master rigger—senior or master rigger ratings.
Ground instructor—ratings for each subject in which the holder is qualified to give instruction.

* Special ratings shown on pilot certificates represented above; not included in total.

N/AP—not applicable

Table 7.17
ORIGINAL AIRMEN CERTIFICATES ISSUED BY CATEGORY
CALENDAR YEARS 1983-1992

Category of Certificate	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Pilot—Total	**150,419**	**141,761**	**135,589**	**141,625**	**149,640**	**148,018**	**146,951**	**156,955**	**161,009**	**143,532**
Student	92,239	90,085	86,060	88,699	85,611	86,193	87,427	88,586	82,205	78,377
Recreational	N/A	N/A	N/A	N/A	N/A	N/A	N/A	29	87	74
Airplane										
Private	41,210	36,545	35,402	34,816	42,278	39,900	35,360	41,749	49,580	39,968
Commercial	8,789	7,702	5,404	8,889	11,314	12,042	13,759	15,500	16,869	14,354
Airline Transport	5,643	5,099	6,081	6,498	7,678	7,461	7,829	8,013	8,437	7,699
Helicopter (only)	1,932	1,806	2,105	2,209	2,217	1,947	2,240	2,700	3,344	2,684
Glider (only)	606	524	537	514	542	475	336	378	487	376
Nonpilot—Total	**15,702**	**15,438**	**16,332**	**16,470**	**21,878**	**21,064**	**23,078**	**27,113**	**31,882**	**27,543**
Mechanic	11,676	10,719	10,559	10,998	15,089	14,907	15,923	19,861	24,299	20,532
Parachute Rigger	214	149	157	149	194	142	167	227	228	232
Ground Instructor	1,524	1,283	1,359	1,386	1,825	1,716	2,133	2,664	3,527	3,508
Dispatcher	632	755	522	516	533	510	431	550	623	674
Flight Navigator	15	14	1	17	4	17	14	1	3	2
Flight Engineer	1,641	2,518	3,734	3,404	4,233	3,772	4,410	3,810	3,202	2,595
Flight Instructor Certificates[2]	4,614	4,075	4,298	4,628	6,327	4,898	5,365	7,071	8,164	7,151
Instrument Ratings[3]	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP

[2] Special ratings shown on pilot certificates represented above; not included in total.
[3] estimate
N/A Not Available.
N/AP Not Applicalbe

Table 7.18
ADDITIONAL AIRMEN RATINGS ISSUED BY CATEGORY
CALENDAR YEARS 1983-1992

Category of Certificate	1883	1984	1985	1986	1987	1988	1989	1990	1991	1992
Pilot—Total	**30,898**	**30,469**	**28,420**	**32,628**	**39,990**	**37,921**	**46,990**	**45,730**	**51,435**	**44,760**
Student	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP
Recreational	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP
Airplane.										
Private	12,721	11,784	11,686	12,672	16,302	15,800	22,240	19,299	23,630	19,416
Commercial	9,513	8,892	7,197	9,241	11,365	10,597	11,778	12,584	13,506	11,630
Airline Transport	8,187	9,335	9,192	10,372	11,956	11,209	12,698	13,540	13,979	13,391
Helicopter (only)	315	319	207	234	293	287	252	266	291	291
Glider (only)	162	139	138	109	74	28	22	41	29	32
Nonpilot—Total	**5,420**	**4,808**	**4,713**	**5,010**	**5,486**	**6,107**	**7,688**	**8,387**	**9,567**	**7,267**
Mechanic	4,470	4,042	3,429	3,289	4,195	4,353	5,728	6,381	7,653	6,499
Parachute Rigger	13	12	9	11	11	8	21	12	33	22
Ground Instructor	371	293	343	323	366	334	399	434	493	518
Dispatcher	1	3	3	1	3	2	5	2	3	0
Flight Navigator	2	0	0	0	0	0	0	1	0	0
Flight Engineer	563	458	929	1,386	911	1,410	1,535	1,557	1,385	228
Flight Instructor Certificates[1]	**7,698**	**6,828**	**5,921**	**5,421**	**6,378**	**5,234**	**7,532**	**8,517**	**9,470**	**8,161**
Instrument Ratings[2]	**11,078**	**10,845**	**11,683**	**13,688**	**18,296**	**16,910**	**20,911**	**22,528**	**26,007**	**20,062**

[1] Not included in total.
[2] Special ratings shown on pilot certificates represented above; not included in total.
N/A Not Available.
N/AP Not Applicable
Note: Additional ratings are entered on current airman certificates as follows:
Private, commercial, and airline transport pilot—aircraft category, class, and type instrument rating.
Helicopter pilot—instrument and type ratings.
Flight instructor—ratings for each aircraft category in which the holder is qualified, and for instrument flying instructions.
Mechanic—airframe and powerplant ratings.
Parachute rigger—senior or master rigger—senior or master rigger ratings.
Ground instructor—ratings for each subject in which the holder is qualified to give instruction.

Table 7.19
AIRMEN CERTIFICATES APPROVED/DISAPPROVED BY CATEGORY AND CONDUCTOR
1992

Category of Certificate	Original Issuances						Additional Ratings					
	Examiner			Inspector			Examiner			Inspector		
	Approved	Disapproved	Total	Approved	Disapproved	Total	Approved	Disapproved	Total	Approved	Disapproved	Total
Pilot—Total	**50,912**	**9,710**	**60,622**	**670**	**263**	**933**	**39,224**	**4,877**	**44,101**	**1,321**	**175**	**1,496**
Recreational	65	3	68	4	0	4	N/AP	N/AP	N/AP	N/AP	N/AP	N/AP
Airplane												
Private	31,862	6,985	38,847	193	41	234	17,295	3,712	21,007	138	33	171
Commercial	10,207	1,818	12,025	31	31	62	9,625	621	10,246	173	25	198
Airline Transport	6,811	904	7,715	367	191	558	12,078	544	12,622	998	117	1,115
Helicopter (only)	1,616	0	1,616	61	0	61	226	0	226	12	0	12
Glider (only)	351	0	351	14	0	14	0	0	0	0	0	0
Nonpilot—Total	**20,253**	**644**	**20,897**	**426**	**55**	**481**	**5,791**	**63**	**5,854**	**67**	**9**	**76**
Mechanic	17,373	489	17,862	27	23	50	5,639	55	5,694	15	7	22
Parachute Rigger	134	5	139	14	1	15	12	0	12	1	0	1
Ground Instructor	355	0	355	15	1	16	59	0	59	3	0	3
Dispatcher	498	52	550	130	12	142	0	2	2	0	0	0
Flight Navigator	1	0	1	0	0	0	0	0	0	0	0	0
Flight Engineer	1,892	98	1,990	240	18	258	81	6	87	48	2	50
Flight Instructor Certificates[1]	5,488	2,209	7,697	1,429	524	1,953	7,854	469	8,323	288	61	349

Note: Additional ratings are entered on current airman certificates as follows:
Private, commercial, and airline transport pilot—aircraft category, class, and type instrument rating.
Helicopter pilot—instrument and type ratings.
Flight instructor—ratings for each aircraft category in which the holder is qualified, and for instrument flying instructions.
Mechanic—airframe and powerplant ratings.
Parachute rigger—senior or master rigger—senior or master rigger ratings.
Ground instructor—ratings for each subject in which the holder is qualified to give instruction.
[1] Special ratings shown on pilot certificates represented above; not included in total.
N/AP—Not applicable

TABLE 7.20
PERCENTAGE OF AIRMEN CERTIFICATE ISSUANCES APPROVED BY CATEGORY AND CONDUCTOR
1992

Category of Certificate	Original Issuances		Additional Ratings	
	Examiner	Inspector	Examiner	Inspector
Pilot—Total	**84.0%**	**71.8%**	**88.9%**	**88.3%**
Recreational	95.6%	100.0%	N/AP	N/AP
Airplane				
Private	82.0%	82.5%	82.3%	80.7%
Commercial	84.9%	50.0%	93.9%	87.4%
Airline Transport	88.3%	65.8%	95.7%	89.5%
Helicopter (only)	100.0%	100.0%	100.0%	100.0%
Glider (only)	100.0%	100.0%	0.0%	0.0%
Nonpilot—Total	**96.9%**	**88.6%**	**98.9%**	**88.2%**
Mechanic	97.3%	54.0%	99.0%	68.2%
Parachute Rigger	96.4%	93.3%	100.0%	100.0%
Ground Instructor	100.0%	93.8%	100.0%	100.0%
Dispatcher	90.5%	91.5%	0.0%	0.0%
Flight Navigator	100.0%	0.0%	0.0%	0.0%
Flight Engineer	95.1%	93.0%	93.1%	96.0%
Flight Instructor Certificates[1]	**71.3%**	**73.2%**	**94.4%**	**82.5%**

Note: Additional ratings are entered on current airman certificates as follows:
Private, commercial, and airline transport pilot—aircraft category, class, and type instrument rating.
Helicopter pilot—instrument and type ratings.
Flight instructor—ratings for each aircraft category in which the holder is qualified, and for instrument flying instructions.
Mechanic—airframe and powerplant ratings.
Parachute rigger—senior or master rigger—senior or master rigger ratings.
Ground instructor—ratings for each subject in which the holder is qualified to give instruction.
[1] Special ratings shown on pilot certificates represented above; not included in total.
N/AP—Not applicable

TABLE 7.21
INSTRUMENT RATINGS ISSUED
1983–1992

Class of Certificate	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total—All Pilots	**11,078**	**10,845**	**11,899**	**13,687**	**18,296**	**16,810**	**20,911**	**22,528**	**25,992**	**20,062**
AIRPLANE										
Private —Total	**7,034**	**6,599**	**6,887**	**8,354**	**11,142**	**9,772**	**11,681**	**13,066**	**15,934**	**13,121**
Private Airplane (only)	6,549	6,140	6,438	7,840	10,397	8,946	10,554	11,848	14,362	11,769
Private Airplane, Private Glider	92	91	75	95	135	92	93	111	128	100
Private Airplane, Commercial Glider	5	3	1	1	12	18	18	15	30	13
Private Airplane, Private Helicopter	20	27	26	29	35	40	38	36	59	72
Private Airplane, Private Glider, Private Helicopter	1	0	0	0	1 3	1	2	0		
Private Airplane, Commercial Helicopter	149	139	172	178	234	272	293	309	359	333
Private Airplane, Other	218	190	175	211	328	404	682	745	994	834
Commercial —Total	**2,956**	**3,275**	**3,655**	**4,183**	**5,996**	**6,101**	**8,091**	**8,338**	**8,911**	**8,003**
Commercial Airplane (only)	2,376	2736	2,981	3,437	5,044	5,267	7,122	7,408	7,970	5,081
Commercial Airplane, Private Glider	23	28	29	31	48	49	54	54	58	33
Commercial Airplane, Commercial Glider	36	29	32	31	61	41	54	66	54	48
Commercial Airplane, Private Helicopter	5	3	11	5	14	11	12	12	22	17
Commercial Airplane, Commercial Helicopter	495	453	586	666	814	723	843	788	802	810
Commercial Airplane, Private Glider, Commercial Helicopter	4	1	2	3	7	3	3	4	1	2
Commercial Airplane, Commercial Glider, Commercial Helicopter	14	25	11	9	7	6	1	4	3	9
Commercial Airplane, Other	3	0	3	1	1	1	2	2	1	3
ROTORCRAFT										
Commercial—Total	**1,088**	**980**	**1,157**	**1,150**	**1,158**	**937**	**1,139**	**1,125**	**1,147**	**938**
Commercial Helicopter	1,085	977	1,156	1,145	1,135	909	1,113	1,097	1,103	898
Commercial Helicopter, Private Glider	0	0	1	0	1	0	0	1	4	0
Commercial Helicopter, Commercial Glider	1	1 1	0	0	0	0	0	0		
Commercial Helicopter, *Airline Transport Helicopter*	0	1	0	0	20	22	17	20	28	19
Commercial Helicopter, Other	2	1	0	4	2	6	9	7	12	21

Table 7.22
STUDENT CERTIFICATES ISSUED, BY MONTH
1983–1992

YEAR	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
TOTAL	**93,239**	**90,167**	**86,060**	**88,706**	**85,661**	**82,110**	**87,427**	**88,586**	**82,205**	**78,377**
January	6,511	7,485	6,414	6,641	6,098	5,410	7,789	6,699	5,704	6,104
February	6,146	6,338	5,233	5,590	6,543	6,157	7,156	6,266	5,541	5,773
March	7,724	7,086	6,809	6,472	7,125	7,133	6,833	7,372	5,950	6,773
April	6,737	6,931	7,492	7,488	7,139	6,606	6,059	7,044	6,513	6,703
May	7,650	7,784	7,749	7,415	6,164	7,014	6,870	7,604	6,622	6,299
June	9,344	8,533	8,279	8,211	8,491	8,539	8,675	8,284	7,932	7,819
July	9,253	9,202	9,249	9,648	8,973	7,796	8,305	9,037	8,442	8,074
August	10,426	9,559	8,892	8,886	8,389	8,981	8,976	9,155	8,580	7,210
September	9,971	7,781	7,973	8,961	8,109	7,624	8,080	7,509	7,630	7,251
October	8,040	8,129	7,892	8,133	7,585	7,133	7,616	8,103	7,956	6,760
November	6,500	6,291	5,579	5,809	5,912	6,086	6,203	6,551	7,661	5,240
December	4,937	5,048	4,499	5,452	5,133	3,631	4,865	4,962	3,674	4,371

VIII. GENERAL AVIATION AIRCRAFT

General aviation aircraft activity information was obtained using the General Aviation Activity and Avionics Survey, which is mailed to the owners of a sample of registered general aviation aircraft. The sample is a scientifically designed random sample which represents all general aviation aircraft registered in the United States.

The survey collects data relative to flight hours, airframe hours and the avionics equipment on board the aircraft. In addition, the survey collects information about the number of hours flown under instrument flight rules, fuel consumption rates, and the state where the aircraft is based.

The estimates for 1991 were adjusted to reflect the effects on nonrespondents. A survey of nonrespondents to the 1990 survey found that the proportion of nonrespondents that were active was less than that of the respondents. It also found that that if the aircraft was active it flew about the same number of annual hours as the respondent's aircraft.

Because the estimates are derived from a sample—not the total population of aircraft—a certain amount of sampling error is introduced. The user must consider this error along with the estimate itself when making an inference or drawing any conclusions about the aircraft population. Although the exact value of the sample error is unknown, a quantity known as the standard error is used to approximate it. Using the standard error, one can develop an interval within which the true population estimate will lie with a known probability. The probability that the true value lies within the interval depends on the width of the interval, i.e., the estimate plus or minus 1, 2, or 3 times the standard error. The table below shows selected interval widths and their corresponding confidence.

Width of Interval	Approximate Confidence That Interval Includes True Value
1 standard error	68%
2 standard errors	95%
3 standard errors	99%

For example, if the estimate for the total number of active piston powered rotorcraft were 2,658 and the standard error was 176, then the 95% confidence interval would be 2,658 + 2(176) or (2306, 3010). One would say that there is a 95% chance that the number of active piston powered rotorcraft lies between 2306 and 3010.

In some tables, the standard error is expressed as a percent. To calculate the standard error, multiply the estimated by the percentage. To derive the 95% confidence interval, proceed as before. For example, if total hours flown were 35,792 thousand hours and the percentage standard error was 3.0%, the 95% confidence interval would be:

$$35{,}792 + (2 \times 3\% \times 35{,}792) = 35{,}792 \pm 2148 = (33{,}644: 37{,}940)$$

The standard error, percent standard error, or a code for the standard error is shown for each estimate made from the sample in this chapter.

More detailed estimates and more detailed discussion of the survey and its methodology are available in *General Aviation Activity and Avionics Survey.*

TABLE 8.1
ACTIVE GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE: 1992
(Percent standard error is shown in parenthesis)

Aircraft Type	Total	Corporate	Business	Personal	Instructional	Aerial Application	Aerial Observation	Other Work	Commuter Air Carrier	Air Taxi	Other
Fixed-Wing—Total	**170,844**	**8,670**	**28,519**	**101,978**	**14,911**	**4,269**	**4,145**	**1,041**	**795**	**3,761**	**2,755**
	(0.7%)	**(3.9%)**	**(2.9%)**	**(1.0%)**	**(4.4%)**	**(3.2%)**	**(8.9%)**	**(16.4%)**	**(16.9%)**	**(8.1%)**	**(9.2%)**
Piston—Total	**162,117**	**3,293**	**27,512**	**101,680**	**14,787**	**3,987**	**4,078**	**986**	**524**	**2,904**	**2,365**
	(0.7%)	**(9.2%)**	**(3.0%)**	**(1.0%)**	**(4.5%)**	**(3.4%)**	**(9.1%)**	**(17.2%)**	**(23.8%)**	**(10.0%)**	**(10.4%)**
One Engine	143,580	1,080	21,513	95,799	13,638	3,764	3,819	826	194	1,085	1,861
	(0.8%)	(17.9%)	(3.6%)	(1.0%)	(4.7%)	(3.3%)	(9.5%)	(20.0%)	(36.0%)	(18.1%)	(12.2%)
Two Engine	18,451	2,213	5,994	5,864	1,142	205	257	160	330	1,819	467
	(1.7%)	(10.6%)	(5.4%)	(5.4%)	(13.9%)	(24.8%)	(28.0%)	(22.7%)	(21.3%)	(11.7%)	(20.4%)
Other Piston	86	0	4	17	7	18	2	0	0	0	37
	(17.7%)	(0.0%)	(0.0%)	(25.1%)	(32.9%)	(18.1%)	(87.9%)	(0.0%)	(0.0%)	(0.0%)	(13.2%)
Turboprop—Total	**4,704**	**2,470**	**607**	**215**	**105**	**269**	**54**	**55**	**228**	**525**	**176**
	(3.1%)	**(4.8%)**	**(14.8%)**	**(23.7%)**	**(38.0%)**	**(5.2%)**	**(45.7%)**	**(31.1%)**	**(17.7%)**	**(14.4%)**	**(20.8%)**
Two Engine	4,094	2,448	570	157	73	0	22	53	209	436	126
	(3.5%)	(4.8%)	(15.2%)	(30.6%)	(52.4%)	(0.0%)	(100.3%)	(31.6%)	(18.2%)	(16.7%)	(26.2%)
Other Turboprop	610	22	37	58	32	269	32	1	19	90	51
	(3.0%)	(67.9%)	(47.0%)	(28.9%)	(34.7%)	(5.2%)	(34.6%)	(173.7%)	(69.8%)	(24.0%)	(32.2%)
Turbojet—Total	**4,022**	**2,907**	**400**	**83**	**19**	**12**	**13**	**0**	**43**	**332**	**213**
	(2.4%)	**(3.4%)**	**(19.4%)**	**(38.0%)**	**(43.7%)**	**(123.9%)**	**(61.4%)**	**(0.0%)**	**(69.1%)**	**(18.4%)**	**(21.0%)**
Two Engine	3,790	2,781	396	54	19	12	3	0	43	332	151
	(2.3%)	(3.5%)	(19.6%)	(55.7%)	(43.7%)	(123.9%)	(129.0%)	(0.0%)	(69.1%)	(18.4%)	(28.6%)
Other Turbojet	232	126	4	29	0	0	10	0	0	0	63
	(15.3%)	(7.5%)	(96.4%)	(33.6%)	(0.0%)	(0.0%)	(69.9%)	(0.0%)	(0.0%)	(0.0%)	(19.3%)
Rotorcraft—Total	**5,753**	**532**	**347**	**819**	**535**	**786**	**1,220**	**259**	**17**	**863**	**376**
	(3.8%)	**(20.3%)**	**(24.8%)**	**(11.3%)**	**(18.0%)**	**(15.5%)**	**(12.3%)**	**(31.7%)**	**(149.2%)**	**(14.8%)**	**(22.2%)**
Piston	2,211	16	150	677	444	305	440	66	0	44	69
	(7.7%)	(128.0%)	(38.3%)	(11.2%)	(18.0%)	(18.6%)	(15.8%)	(48.2%)	(0.0%)	(70.4%)	(16.5%)
Turbine	3,542	515	198	142	92	481	780	193	17	819	306
	(3.9%)	(20.5%)	(32.5%)	(37.0%)	(58.4%)	(22.5%)	(17.1%)	(39.3%)	(149.2%)	(15.1%)	(27.0%)
Other—Total	**7,837**	**199**	**76**	**5,962**	**543**	**13**	**228**	**388**	**2**	**24**	**412**
	(1.9%)	**(29.6%)**	**(42.5%)**	**(2.4%)**	**(13.8%)**	**(117.2%)**	**(29.3%)**	**(20.1%)**	**(319.4%)**	**(42.0%)**	**(19.8%)**
Total All Aircraft	**184,434**	**9,400**	**28,942**	**108,749**	**15,990**	**5,067**	**5,593**	**1,689**	**813**	**4,648**	**3,542**
	(0.7%)	**(3.9%)**	**(2.9%)**	**(1.0%)**	**(4.2%)**	**(36.0%)**	**(7.2%)**	**(12.1%)**	**(16.8%)**	**(7.1%)**	**(7.9%)**

NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.2
ACTIVE GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE 1983–1992
(Percent Standard error is shown in parenthesis)

Aircraft Type	1992	1991	1990[1]	1989[1]	1988[1]	1987[1]	1986[1]	1985[1]	1984	1983
Fixed-Wing—Total	**170,844**	**184,620**	**184.5**	**190.8**	**183.8**	**190.5**	**192.3**	**184.7**	**207,571**	**200,831**
	(0.7%)	**(0.7%)**	**(0.5%)**	**(0.5%)**	**(0.6%)**	**(0.5%)**	**(0.5%)**	**(0.6%)**	**(0.5%)**	**(0.7%)**
Piston—Total	**162,117**	**175,347**	**175.2**	**180.8**	**175.0**	**181.5**	**182.5**	**175.6**	**197,442**	**191,480**
	(7.0%)	**(0.7%)**	**(0.6%)**	**(0.5%)**	**(0.6%)**	**(0.5%)**	**(0.6%)**	**(0.6%)**	**(0.5%)**	**(0.7%)**
One Engine	143,580	154,102	154.0	158.9	153.7	159.7	160.3	153.4	171,922	166,247
	(0.8%)	(0.8%)	(0.6%)	(0.6%)	(0.6%)	(0.6%)	(0.6%)	(0.7%)	(0.5%)	(0.8%)
Two Engine	18,451	21,119	21.1	21.8	21.2	21.7	22.1	22.1	25,258	24,910
	(1.7%)	(1.7%)	(1.3%)	(1.2%)	(1.4%)	(1.3%)	(1.6%)	(1.5%)	(1.2%)	(1.4%)
Other Piston	86	127	0.1	0.1	0.1	0.1	0.1	0.1	262	143
	(17.7%)	(22.2%)	(30.0%)	(33.6%)	(21.7%)	(25.0%)	(24.3%)	(20.9%)	(13.4%)	(9.8%)
Turboprop—Total	**4,704**	**4,920**	**5.3**	**5.9**	**4.9**	**4.9**	**5.6**	**5.0**	**5,809**	**5,453**
	(3.1%)	**(2.7%)**	**(1.8%)**	**(1.5%)**	**(1.7%)**	**(1.9%)**	**(1.9%)**	**(2.1%)**	**(1.0%)**	**(1.7%)**
Two Engine	4,094	4,398	4.9	5.7	4.7	4.7	5.4	4.9	5,633	5,311
	(3.5%)	(3.0%)	(1.8%)	(1.5%)	(1.8%)	(1.9%)	(1.9%)	(2.1%)	(1.0%)	(1.6%)
Other Turboprop	610	522	0.4	0.2	0.2	0.2	0.2	0.1	176	142
	(3.0%)	(2.4%)	(7.0%)	(14.2%)	(7.1%)	(8.9%)	(16.2%)	(7.8%)	(8.5%)	(26.8%)
Turbojet—Total	**4,022**	**4,353**	**4.1**	**4.1**	**3.9**	**4.0**	**4.2**	**4.1**	**4,320**	**3,898**
	(2.4%)	**(2.0%)**	**(2.0%)**	**(1.5%)**	**(2.0%)**	**(1.5%)**	**(2.2%)**	**(1.7%)**	**(1.6%)**	**(3.3%)**
Two Engine	3,790	4,066	3.7	3.7	3.6	3.6	3.8	3.6	3,780	3,447
	(2.3%)	(1.9%)	(2.0%)	(1.4%)	(2.1%)	(1.6%)	(1.6%)	(1.7%)	(1.3%)	(2.7%)
Other Turbojet	232	286	0.4	0.4	0.3	0.4	0.4	0.5	540	451
	(15.3%)	(14.4%)	(8.2%)	(8.2%)	(5.5%)	(5.0%)	(16.2%)	(7.2%)	(26.9%)	(20.2%)
Rotorcraft—Total	**5,753**	**6,292**	**6.9**	**7.0**	**6.0**	**5.9**	**6.5**	**6.0**	**7,096**	**6,540**
	(3.8%)	**(3.5%)**	**(3.0%)**	**(0.6%)**	**(3.6%)**	**(3.2%)**	**(3.1%)**	**(4.0%)**	**(3.1%)**	**(3.7%)**
Piston	2,211	2,470	3.2	3.0	2.4	2.6	2.7	2.7	2,936	2,541
	(7.7%)	(7.6%)	(5.3%)	(1.2%)	(7.9%)	(5.0%)	(6.0%)	(7.0%)	(6.3%)	(7.5%)
Turbine	3,542	3,822	3.7	4.0	3.6	3.3	3.8	3.3	4,160	3,998
	(3.9%)	(2.9%)	(3.1%)	(0.4%)	(2.7%)	(4.2%)	(3.1%)	(4.5%)	(2.8%)	(3.8%)
Other—Total	**7,837**	**7,563**	**6.6**	**7.2**	**6.4**	**6.3**	**6.5**	**5.8**	**6,275**	**5,923**
	(1.9%)	**(2.9%)**	**(3.0%)**	**(2.4%)**	**(4.1%)**	**(3.4%)**	**(3.0%)**	**(3.3%)**	**(2.7%)**	**(3.5%)**
Total All Aircraft	**184,434**	**198,475**	**198.0**	**205.0**	**196.2**	**202.7**	**205.3**	**196.5**	**220,943**	**213,293**
	(0.7%)	**(0.7%)**	**(0.5%)**	**(0.5%)**	**(0.5%)**	**(0.5%)**	**(0.5%)**	**(0.6%)**	**(0.5%)**	**(0.6%)**

[1] Revised to correct for nonresponse bias.

NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.3
ACTIVE GENERAL AVIATION AIRCRAFT
BY PRIMARY USE
1983–1992
(Aircraft in Thousands)

Use Category	1992	1991	1990 [1]	1989 [1]	1988 [1]	1987 [1]	1986 [1]	1985 [1]	1984	1983
Corporate	9.4	10.0	10.1	11.5	10.2	11.1	11.3	12.7	16.7	17.1
Business	28.9	31.6	33.1	35.0	32.6	37.3	40.8	42.5	47.1	45.0
Personal	108.7	115.1	112.6	116.4	114.4	115.3	112.2	96.2	105.3	101.5
Instructional	16.0	17.9	18.6	16.6	15.6	14.7	14.8	13.4	15.3	15.4
Aerial Application	5.1	7.0	6.2	6.6	6.6	6.1	6.6	6.8	7.3	7.1
Aerial Observation	5.6	5.1	4.9	5.4	4.4	4.5	4.4	4.2	5.2	4.0
Other Work	1.7	1.7	1.4	2.0	1.7	1.5	1.2	1.5	1.3	2.4
Commuter Air Taxi	0.8	0.7	1.2	1.3	0.9	0.9	1.6	0.8	1.2	1.5
Air Taxi	4.7	5.5	5.8	6.6	6.0	5.8	7.1	6.0	7.3	6.9
Other	3.5	3.9	4.1	3.6	3.8	5.5	5.3	5.0	4.8	7.7
Rental	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.4	9.4	4.8
Total	**184.4**	**196.5**	**196.0**	**205.0**	**196.2**	**202.7**	**205.3**	**196.5**	**220.9**	**213.3**

[1] Revised to reflect effects of nonresponse.

N/A- Rental Hours no longer collected as separate use category.

NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.4
ACTIVE GENERAL AVIATION AIRCRAFT TOTAL HOURS FLOWN, BY AIRCRAFT TYPE AND PRIMARY USE: 1992

(Percent standard error is shown in parenthesis)

Aircraft Type	Total	Corporate	Business	Personal	Instructional	Aerial Application	Aerial Observation	Other Work	Commuter Air Carrier	Air Taxi	Other
Fixed-Wing—Total	**23,800,912**	**2,066,913**	**3,462,537**	**8,297,385**	**5,100,909**	**1,009,874**	**1,101,549**	**212,510**	**676,420**	**1,315,660**	**265,641**
	(1.7%)	**(4.7%)**	**(3.7%)**	**(1.9%)**	**(5.8%)**	**(5.6%)**	**(12.2%)**	**(18.5%)**	**(18.3%)**	**(9.8%)**	**(12.9%)**
Piston—Total	**21,250,908**	**591,999**	**3,276,806**	**8,266,048**	**5,079,278**	**969,206**	**1,084,651**	**194,186**	**406,590**	**1,040,919**	**210,997**
	(1.9%)	(11.1%)	(3.8%)	(1.9%)	(5.8%)	(6.1%)	(12.3%)	(19.9%)	(27.5%)	(11.7%)	(15.1%)
One Engine	18,074,428	140,520	2,518,141	7,706,038	4,731,819	838,181	1,014,904	175,145	113,563	464,447	180,836
	(2.1%)	(22.1%)	(4.5%)	(1.9%)	(6.1%)	(6.3%)	(12.9%)	(22.8%)	(53.6%)	(21.0%)	(17.4%)
Two Engine	3,172,046	451,478	757,753	559,872	347,459	29,994	69,746	19,040	293,027	576,472	28,966
	(3.9%)	(13.1%)	(6.8%)	(6.7%)	(16.6%)	(27.4%)	(28.7%)	(22.9%)	(32.6%)	(12.6%)	(22.2%)
Other Piston	4,432	0	912	139	0	1,031	0	0	0	0	1,195
	(22.6%)	(0.0%)	(84.5%)	(25.1%)	(0.0%)	(19.8%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(30.5%)
Turboprop—Total	**1,477,709**	**604,637**	**113,597**	**23,123**	**21,383**	**140,669**	**16,458**	**18,325**	**260,319**	**199,954**	**32,217**
	(5.7%)	**(6.8%)**	**(16.8%)**	**(25.7%)**	**(59.3%)**	**(13.0%)**	**(55.4%)**	**(29.8%)**	**(18.4%)**	**(18.1%)**	**(24.5%)**
Two Engine	1,237,576	600,186	108,181	19,343	16,251	0	3,951	17,823	250,10	149,850	29,120
	(6.5%)	(6.8%)	(17.7%)	(32.9%)	(148.8%)	(0.0%)	(106.4%)	(30.1%)	(19.4%)	(20.9%)	(42.4%)
Other Turboprop	240,133	4,451	5,416	3,780	5,132	140,669	12,506	502	10,214	50,104	3,097
	(10.2%)	(66.1%)	(48.2%)	(30.6%)	(62.2%)	(13.0%)	(38.1%)	(173.7%)	(70.9%)	(29.2%)	(52.9%)
Turbojet—Total	**1,072,293**	**870,277**	**72,135**	**8,214**	**248**	**0**	**441**	**0**	**9,511**	**74,787**	**22,427**
	(4.2%)	**(4.7%)**	**(22.7%)**	**(48.4%)**	**(48.0%)**	**(0.0%)**	**(272.0%)**	**(0.0%)**	**(610.5%)**	**(23.0%)**	**(22.1%)**
Two Engine	1,030,381	838,314	71,025	7,259	248	0	441	0	9,511	74,787	21,325
	(4.3%)	(4.9%)	(22.9%)	(63.3%)	(48.0%)	(0.0%)	(129.4%)	(0.0%)	(61.5%)	(23.0%)	(37.5%)
Other Turbojet	41,912	31,963	1,109	955	0	0	0	0	0	0	1,102
	(16.4%)	(11.1%)	(119.7%)	(37.3%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(27.4%)
Rotorcraft—Total	**2,282,703**	**158,704**	**71,193**	**44,862**	**165,213**	**285,772**	**610,301**	**108,065**	**16,135**	**692,261**	**76,856**
	(6.6%)	**(25.5%)**	**(24.1%)**	**(12.1%)**	**(20.5%)**	**(15.6%)**	**(16.0%)**	**(37.7%)**	**(148.2%)**	**(18.2%)**	**(17.8%)**
Piston	416,376	1,013	13,960	26,404	145,450	73,102	92,962	6,133	0	27,426	4,690
	(12.4%)	(175.7%)	(37.1%)	(12.6%)	(21.1%)	(21.7%)	(21.9%)	(41.9%)	(0.0%)	(69.7%)	(17.7%)
Turbine	1,866,327	157,690	57,213	18,458	19,764	212,671	517,319	101,932	16,135	664,835	72,167
	(7.6%)	(25.7%)	(33.4%)	(42.3%)	(60.1%)	(21.8%)	(20.6%)	(47.4%)	(148.2%)	(18.8%)	(20.4%)
Other—Total	**409,872**	**36,516**	**2,939**	**249,528**	**74,172**	**0**	**17,830**	**22,785**	**34**	**881**	**15,748**
	(6.0%)	**(57.0%)**	**(51.0%)**	**(5.6%)**	**(15.4%)**	**(0.0%)**	**(24.1%)**	**(24.4%)**	**(319.4%)**	**(56.9%)**	**(26.3%)**
Total All Aircraft	**26,493,480**	**2,262,134**	**3,536,669**	**8,591,779**	**5,340,294**	**1,295,646**	**1,729,679**	**343,360**	**692,589**	**2,008,801**	**358,245**
	(1.6%)	**(4.6%)**	**(3.6%)**	**(1.8%)**	**(5.5%)**	**(5.2%)**	**(9.5%)**	**(14.2%)**	**(18.1%)**	**(8.7%)**	**(10.4%)**

TABLE 8.5
ACTIVE GENERAL AVIATION AIRCRAFT
TOTAL HOURS FLOWN
BY AIRCRAFT TYPE 1983–1992

(Hours in Thousands)

(Percent Standard error is shown in parenthesis)

Aircraft Type	1992	1991	1990[1]	1989[1]	1988[1]	1987[1]	1986[1]	1985[1]	1984	1983
Fixed-Wing—Total	**23,801**	**26,851**	**29,546**	**29,327**	**28,040**	**28,391**	**28,994**	**29,085**	**33,265**	**32,558**
	(1.7%)	**(1.9%)**	**(1.8%)**	**(1.7%)**	**(1.8%)**	**(1.7%)**	**(1.7%)**	**(1.7%)**	**(2.1%)**	**(2.1%)**
Piston—Total	**21,251**	**24,102**	**25,832**	**24,907**	**24,291**	**24,969**	**24,805**	**25,666**	**29,194**	**28,911**
	(1.9%)	**(2.1%)**	**(2.0%)**	**(1.9%)**	**(2.0%)**	**(1.9%)**	**(1.9%)**	**(1.9%)**	**(1.8%)**	**(2.3%)**
One Engine	18,074	20,540	21,883	20,600	20,326	20,446	20,260	21,102	23,506	23,149
	(2.1%)	(2.3%)	(2.2%)	(2.2%)	(2.2%)	(2.0%)	(2.1%)	(2.1%)	(2.1%)	(2.6%)
Two Engine	3,172	3,555	3,897	4,292	3,943	4,509	4,535	4,539	5,585	5,730
	(3.9%)	(4.1%)	(3.8%)	(3.3%)	(4.1%)	(5.2%)	(4.6%)	(4.1%)	(3.6%)	(5.3%)
Other Piston	4	7	53	16	20	14	10	24	102	32
	(22.6%)	(33.5%)	(48.7%)	(67.3%)	(44.5%)	(33.3%)	(45.5%)	(34.6%)	(29.4%)	(31.2%)
Turboprop—Total	**1,478**	**1,513**	**2,319**	**2,892**	**2,195**	**2,010**	**2,661**	**1,921**	**2,506**	**2,173**
	(5.7%)	**(5.3%)**	**(6.4%)**	**(5.0%)**	**(5.0%)**	**(5.0%)**	**(5.1%)**	**(4.6%)**	**(4.7%)**	**(7.1%)**
Two Engine	1,238	1,359	2,162	2,776	2,117	1,841	2,583	1,862	2,452	2,090
	(6.5%)	(5.8%)	(6.8%)	(5.2%)	(5.1%)	(5.0%)	(5.3%)	(4.8%)	(4.7%)	(7.2%)
Other Turboprop	240	154	157	116	78	169	78	59	54	83
	(10.2%)	(12.8%)	(10.9%)	(16.6%)	(14.9%)	(24.6%)	(14.1%)	(10.9%)	(25.9%)	(37.3%)
Turbojet—Total	**1,072**	**1,236**	**1,396**	**1,527**	**1,554**	**1,411**	**1,527**	**1,498**	**1,566**	**1,473**
	(4.2%)	**(4.5%)**	**(4.1%)**	**(3.7%)**	**(4.4%)**	**(3.9%)**	**(4.7%)**	**(4.4%)**	**(4.7%)**	**(6.6%)**
Two Engine	1,030	1,183	1,279	1,424	1,434	1,312	1,446	1,349	1,328	1,350
	(4.3%)	(4.7%)	(4.3%)	(3.9%)	(4.7%)	(4.2%)	(4.9%)	(4.8%)	(5.0%)	(6.8%)
Other Turbojet	42	54	117	103	120	99	90	149	237	124
	(16.4%)	(15.1%)	(12.2%)	(12.2%)	(10.9%)	(10.3%)	(19.4%)	(10.6%)	(13.9%)	(25.0%)
Rotorcraft—Total	**2,283**	**2,757**	**2,209**	**2,610**	**2,507**	**2,108**	**2,424**	**1,990**	**2,495**	**2,271**
	(6.6%)	**(7.5%)**	**(5.9%)**	**(0.9%)**	**(6.5%)**	**(7.4%)**	**(6.7%)**	**(7.7%)**	**(5.5%)**	**(7.0%)**
Piston	416	585	716	692	533	602	742	521	592	572
	(12.4%)	(12.0%)	(10.2%)	(2.1%)	(11.6%)	(9.2%)	(12.8%)	(15.1%)	(11.3%)	(8.6%)
Turbine	1,866	2,172	1,493	1,918	1,974	1,506	1,682	1,468	1,903	1,700
	(7.6%)	(9.0%)	(7.2%)	(0.9%)	(7.6%)	(9.6%)	(7.7%)	(8.9%)	(6.4%)	(8.9%)
Other—Total	**410**	**459**	**341**	**396**	**568**	**384**	**364**	**382**	**358**	**420**
	(6.0%)	**(8.9%)**	**(7.0%)**	**(7.4%)**	**(24.2%)**	**(6.0%)**	**(7.6%)**	**(8.2%)**	**(6.7%)**	**(11.7%)**
Total All Aircraft	**26,493**	**30,067**	**32,096**	**32,332**	**31,114**	**30,883**	**31,782**	**31,456**	**36,119**	**35,249**
	(1.6%)	**(1.8%)**	**(1.7%)**	**(1.6%)**	**(1.7%)**	**(1.7%)**	**(1.6%)**	**(1.6%)**	**(1.6%)**	**(2.0%)**

[1] Revised to correct for nonresponse bias

NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.6
ACTIVE GENERAL AVIATION AIRCRAFT TOTAL HOURS FLOWN BY PRIMARY USE
1983–1992
(Hours in Thousands)

Use Category	1992	1991	1990[1]	1989[1]	1988[1]	1987[1]	1986[1]	1985[1]	1984	1983
Corporate	2,262	2,617	2,913	3,453	3,472	3,143	3,491	3,857	4,773	5,241
Business	3,537	4,154	4,417	4,330	4,594	5,276	5,444	6,034	6,635	5,956
Personal	8,592	9,685	9,276	9,537	10,015	9,961	9,324	7,750	8,417	8,477
Instructional	5,340	6,141	7,244	5,993	4,917	4,529	4,319	3,938	4,553	4,864
Aerial Application	1,296	1,911	1,872	1,868	1,842	1,538	1,833	2,002	2,008	1,762
Aerial Observation	1,730	1,797	1,745	1,719	1,308	1,304	1,496	1,214	1,314	1,137
Other Work	343	471	572	517	525	350	298	317	312	642
Commuter Air Taxi	693	570	1,333	1,392	1,036	1,255	2,018	623	1,504	1,602
Air Taxi	2,009	2,241	2,249	3,020	2,632	2,657	2,690	2,570	3,019	2,528
Other	358	473	475	507	774	871	868	767	729	2,384
Rental	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,385	2,854	553
Total	**26,493**	**30,067**	**32,096**	**32,332**	**31,114**	**30,883**	**31,782**	**31,456**	**36,119**	**35,146**

[1] Revised to reflect effects of nonresponse.

N/A Rental Hours no longer collected as separate use category.

NOTE: Columns may not add to totals due to rounding and estimation procedures

TABLE 8.7
ACTIVE GENERAL AVIATION AIRCRAFT
AVERAGE HOURS FLOWN
BY AIRCRAFT TYPE 1983–1992

(Percent Standard error is shown in parenthesis)

Aircraft Type	1992	1991	1990[1]	1989[1]	1988[1]	1987[1]	1986[1]	1985[1]	1984	1983
Fixed-Wing —Total	**136.7**	**143.8**	**160.1**	**153.7**	**152.6**	**149.0**	**150.8**	**157.5**	**156.0**	**160.9**
	(1.8%)	**(1.9%)**	**(1.8%)**	**(1.7%)**	**(1.8%)**	**(1.7%)**	**(1.7%)**	**(1.7%)**	**(1.7%)**	**(2.1%)**
Piston—Total	**130.4**	**137.5**	**147.4**	**137.8**	**138.8**	**137.6**	**135.9**	**146.2**	**147.1**	**150.6**
	(2.0%)	**(2.0%)**	**(1.9%)**	**(1.9%)**	**(1.9%)**	**(1.8%)**	**(1.8%)**	**(1.8%)**	**(1.8%)**	**(2.3%)**
One Engine	126.1	134.2	142.1	129.6	132.2	128.0	126.4	137.6	137.0	139.0
	(2.2%)	(2.2%)	(2.2%)	(2.2%)	(2.2%)	(2.0%)	(2.0%)	(2.0%)	(2.0%)	(2.5%)
Two Engine	170.3	167.0	184.7	196.9	186.0	207.8	205.2	205.4	218.0	230.0
	(3.9%)	(3.8%)	(3.8%)	(3.1%)	(3.5%)	(5.1%)	(4.4%)	(3.8%)	(3.2%)	(5.2%)
Other Piston	49.6	41.3	526.4	157.0	203.8	138.5	101.6	240.1	433.0	240.0
	(26.5%)	(26.1%)	(30.6%)	(24.9%)	(42.2%)	(22.7%)	(45.4%)	(27.0%)	(24.8%)	(13.4%)
Turboprop—Total	**314.1**	**307.7**	**437.5**	**490.2**	**448.0**	**410.3**	**475.3**	**384.2**	**414.2**	**389.4**
	(4.8%)	**(4.3%)**	**(4.4%)**	**(4.3%)**	**(4.5%)**	**(4.7%)**	**(4.5%)**	**(4.2%)**	**(4.4%)**	**(6.3%)**
Two Engine	301.2	311.9	441.2	487.0	450.5	391.8	478.3	379.9	416.0	386.0
	(5.5%)	(4.5%)	(4.7%)	(4.4%)	(4.6%)	(4.7%)	(4.6%)	(4.4%)	(4.5%)	(6.5%)
Other Turboprop	381.6	279.2	392.5	581.8	389.0	845.0	392.5	591.0	339.0	578.0
	(1.1%)	(14.0%)	(8.3%)	(13.7%)	(16.7%)	(24.5%)	(13.8%)	(6.0%)	(17.2%)	(22.7%)
Turbojet—Total	**270.7**	**289.7**	**340.6**	**372.5**	**398.5**	**352.8**	**363.7**	**365.3**	**353.6**	**382.2**
	3.6	**(4.0%)**	**(3.7%)**	**(3.4%)**	**(3.8%)**	**(3.6%)**	**(4.8%)**	**(4.0%)**	**(4.0%)**	**(5.9%)**
Two Engine	276.9	296.7	345.7	384.9	398.3	364.5	380.6	374.8	348.0	391.0
	(3.7%)	(4.2%)	(4.0%)	(3.6%)	(4.1%)	(3.8%)	(4.8%)	(4.4%)	(4.1%)	(6.2%)
Other Turbojet	180.8	192.0	293.2	258.6	401.4	247.0	226.2	297.4	392.0	273.0
	(13.4%)	(7.5%)	(10.8%)	(11.5%)	(10.4%)	(9.6%)	(28.0%)	(5.8%)	(14.7%)	(14.7%)
Rotorcraft—Total	**381.7**	**451.6**	**320.1**	**372.6**	**417.9**	**357.3**	**372.9**	**331.7**	**343.6**	**350.2**
	(7.8%)	**(7.8%)**	**(5.5%)**	**(0.8%)**	**(6.2%)**	**(7.0%)**	**(6.3%)**	**(6.8%)**	**(5.4%)**	**(6.3%)**
Piston	184.6	233.7	223.7	230.6	222.3	231.6	275.0	192.9	186.0	221.0
	(11.8%)	(9.0%)	(8.9%)	(1.9%)	(9.0%)	(7.8%)	(11.1%)	(12.8%)	(9.7%)	(6.8%)
Turbine	491.3	592.2	403.6	479.5	548.3	456.4	442.5	444.9	468.0	431.0
	(9.1%)	(9.6%)	(6.9%)	(8.0%)	(7.6%)	(9.5%)	(7.6%)	(8.0%)	(6.4%)	(8.0%)
Other—Total	**50.9**	**61.4**	**51.6**	**55.0**	**88.7**	**61.0**	**56.0**	**65.9**	**56.5**	**71.1**
	(8.2%)	**(9.7%)**	**(6.8%)**	**(7.5%)**	**(25.1%)**	**(5.5%)**	**(7.5%)**	**(7.6%)**	**(6.4%)**	**(11.3%)**
Total All Aircraft	**140.4**	**149.1**	**162.1**	**157.7**	**158.6**	**152.4**	**154.8**	**160.1**	**158.1**	**164.0**
	(1.8%)	**(1.8%)**	**(1.7%)**	**(1.6%)**	**(1.7%)**	**(1.6%)**	**(1.6%)**	**(1.6%)**	**(1.6%)**	**(2.0%)**

[1] Revised to correct for nonresponse bias
NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.8
ACTIVE GENERAL AVIATION AIRCRAFT AND HOURS FLOWN BY FAA REGION AND STATE OF BASED AIRCRAFT 1992

FAA Region and State	Active Aircraft		Hours Flown	
	Aircraft	Percent Standard Error	Hours (000)	Percent Standard Error
Total	**184,433**	**0.7%**	**26,493**	**1.8%**
Alaskan—Total	**6,082**	**7.8%**	**1,041**	**10.7%**
Central—Total	**10,251**	**6.2%**	**1,364**	**8.2%**
Iowa	2,489	13.1%	314	16.0%
Kansas	2,973	11.7%	390	12.7%
Missouri	3,068	11.6%	466	17.1%
Nebraska	1,721	15.8%	195	17.3%
Eastern—Total	**21,681**	**4.1%**	**2,858**	**5.7%**
Delaware	1,047	19.6%	190	30.6%
District of Columbia	12	150.0%	6	157.2%
Maryland	2,489	12.9%	299	14.8%
New Jersey	3,547	10.8%	547	13.7%
New York	5,615	8.5%	681	11.0%
Pennsylvania	5,398	8.7%	626	9.9%
Virginia	2,609	12.6%	412	17.4%
West Virginia	966	21.6%	96	23.9%
Great Lakes—Total	**32,944**	**3.2%**	**4,217**	**4.1%**
Illinois	6,373	8.0%	879	8.9%
Indiana	3,411	10.9%	438	13.2%
Michigan	6,248	8.0%	718	9.0%
Minnesota	4,517	9.6%	587	11.4%
North Dakota	1,323	18.1%	221	26.6%
Ohio	6,101	8.1%	801	9.0%
South Dakota	1,005	20.5%	124	25.4%
Wisconsin	3,965	10.2%	449	11.6%
New England—Total	**7,248**	**7.5%**	**811**	**9.2%**
Connecticut	1,589	16.2%	211	18.9%
Maine	982	21.6%	102	26.2%
Massachusetts	2,483	13.2%	239	13.1%
New Hampshire	1,385	17.2%	160	23.7%
Rhode Island	322	36.3%	47	46.5%
Vermont	487	28.7%	51	36.0%
Northwest Mountain—Total	**19,152**	**4.5%**	**2,392**	**5.8%**
Colorado	3,676	10.3%	526	13.1%
Idaho	1,804	15.5%	232	18.0%
Montana	1,923	15.4%	187	18.3%
Oregon	3,935	10.4%	459	12.4%
Utah	1,264	18.8%	206	20.5%
Washington	5,874	8.4%	708	10.8%
Wyoming	677	25.3%	74	27.8%
Southern—Total	**30,793**	**3.4%**	**4,973**	**4.4%**
Alabama	2,873	12.4%	495	14.1%
Florida	11,753	5.8%	2,160	7.1%
Georgia	4,326	9.8%	654	10.9%
Kentucky	1,472	16.8%	195	21.1%
Mississippi	1,776	15.3%	317	19.7%
North Carolina	3,729	10.6%	447	11.3%
Puerto Rico	370	33.0%	82	28.4%
South Carolina	1,669	15.9%	233	19.1%
Tennessee	2,763	12.2%	345	14.0%

TABLE 8.8-Continued
ACTIVE GENERAL AVIATION AIRCRAFT AND HOURS FLOWN BY FAA REGION AND STATE OF BASED AIRCRAFT 1992

FAA Region and State	Active Aircraft		Hours Flown	
	Aircraft	Percent Standard Error	Hours (000)	Percent Standard Error
Southwest—Total	**24,884**	**3.8%**	**3,926**	**5.1%**
Arkansas	2,469	12.6%	488	13.7%
Louisiana	2,823	11.8%	832	15.4%
New Mexico	2,043	13.6%	262	18.3%
Oklahoma	2,762	12.3%	392	15.9%
Texas	14,787	5.1%	1,952	5.9%
Western-Pacific—Total	**31,394**	**3.3%**	**4,913**	**4.3%**
Arizona	4,355	9.7%	816	12.6%
California	24,909	3.8%	3,617	4.3%
Hawaii	372	31.2%	176	34.5%
Nevada	1,684	15.3%	305	24.7%

NOTE: Column totals may differ from printed totals due to estimation procedures.

IX. AIRCRAFT ACCIDENTS

The data presented in this chapter were obtained from the National Transportation Safety Board.

The Safety Board's statistics categorize aviation accidents according to the Federal Air Regulations under which the accident flights were made. The groupings are:

- Large airlines in scheduled and nonscheduled service under Part 121 of the regulations
- Commuter carriers in scheduled service under Part 135
- "On-demand" air taxis in unscheduled operations under Part 135, and
- General aviation—all other civil flying.

See Glossary under "Aircraft Accident": for NTSB definitions for the following terms: "Fatal Injury", "Operator", "Serious Injury", and "Substantial Damage".

More detailed accident data may be obtained from the National Transportation Safety Board.

TABLE 9.1
AIR CARRIER and GENERAL AVIATION
AIRCRAFT ACCIDENTS AND FATALITIES
(Preliminary Data)
1992

Air Carrier and General Aviation Operations	Number of Accidents		Number of Fatalities
	Total	Fatal	
Air Carriers			
Air Carriers Operating Under 14 CFR 121 [1]			
Scheduled	17	4	33
Nonscheduled	2	0	0
Air Carriers Operating under 14 CFR 135			
Scheduled [2]	23	7	21
Nonscheduled [3]	74	24	66
General Aviation [4]	1,956	408	812

[1] Airlines
[2] Commuters
[3] On-Demand Taxis
[4] Includes accidents involving aircraft flown under rules other than CFR 121 and CFR 135.

Source: National Transportation Safety Board.

TABLE 9.2
AIRLINES
(Air Carriers Operating under 14 CFR 121)
ACCIDENTS, FATATITIES, AND RATES
(Preliminary Data)
1992

	Scheduled	Non-scheduled
Accidents		
Total	17	2
Fatal	4	0
Fatalities	33	0
Aircraft Hours Flown (000) [1]	11,600	630
Departures (000) [1]	7,630	360
Accident Rate Per 100,000 Hours Flown		
Total	0.15	0.32
Fatal	0.03	0.00
Accident Rate Per 100,000 Departures		
Total	0.22	0.56
Fatal	0.05	0.00

[1] Exposure data estimate source: Research and Special Programs Administration and FAA

Source: National Transportation Safety Board.

TABLE 9.3
AIRLINES
(Air Carriers Operating under 14 CFR 121)
FATAL ACCIDENTS, FATALITIES
(Preliminary Data)
1992

Location	Operator	Date	Service	Aircraft	Fatalities				Total Aboard	Reported Type of Accident
					Total	Passenger	Crew	Others		
SCHEDULED SERVICE										
Total					**33**	**26**	**5**	**2**	**143**	
Swanton, OH	Air Transport Int'l	Feb 15	Cargo	DC-8-63	4	1	3	0	4	Crashed during a missed approach.
Flushing, NY	USAir	Mar 22	Psgr	F-28-4000	27	25	2	0	51	Crashed during takeoff in wet snow.
Dayton, OH	Trans World	April 8	Psgr	DC-9-32	1	0	0	1	28	Mechanic killed by exploding wheel rim.
Flushing, NY	USAir	Dec 8	Psgr	B-737-300LS	1	0	0	1	60	Ground crewman struck by tug during pushback.
NONSCHEDULED SERVICE										
None.										

Source: National Transportation Safety Board.

TABLE 9.4
AIRLINES: SCHEDULED AND NONSCHEDULED SERVICE [1]
ACCIDENTS, FATALITIES AND RATES
(U.S. Air Carriers Operating Under 14 CFR 121)
1983–1992

	1983	1984	1985	1986 [4]	1987 [4]	1988 [4]	1989 [4]	1990 [4]	1991 [4]	1992 [5]
Accidents										
Total	24	17	22	24	36	29	28	26	27	19
Fatal	4	1	7	3	5	3	11	6	4	4
Total Fatalities	15	4	526	8	232	285	278	39	62 [6]	33
Aircraft Hours Flown (000) [2]	7,299	8,165	8,710	9,976	10,645	11,140	11,274	12,149	11,894	12,230
Aircraft Miles Flown (000,000) [2]	3,069	3,428	3,631	4,018	4,361	4,503	4,605	4,954	4,825	4,987
Departures (000) [2]	5,444	5,899	6,307	7,202	7,601	7,716	7,645	8,127	7,859	7,990
Accident Rate Per 100,000 Hours Flown										
Total	0.33	0.21	0.25	0.23	0.33	0.25	0.25	0.21	0.23	0.16
Fatal	0.06	0.01	0.08	0.02	0.04	0.02	0.10	0.05	0.03	0.03
Accident Rate Per Million Miles Flown										
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00 [3]
Fatal	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]
Accident Rate Per 100,000 Departures										
Total	0.44	0.29	0.35	0.32	0.46	0.36	0.37	0.32	0.34	0.24
Fatal	0.07	0.02	0.11	0.03	0.05	0.03	0.14	0.07	0.05	0.05

[1] Includes accidents involving deregulated all-cargo air carriers and commercial operators of large aircraft when those accidents occurred during scheduled 14 CFR 121 operations.
[2] Exposure data estimate source: Research and Special Programs Administration.
[3] Rounds to 0.00.
[4] Revised.
[5] Preliminary.
[6] Includes 12 persons killed on a Skywest commuter aircraft and 22 persons killed on an USAir airliner when the two aircraft collided.

Source: National Transportation Safety Board

NOTE: The following suicide/sabotage cases are included in Accidents and Fatalities but not in Accident Rates:

Date	Operator	Total	Aboard
04/02/86	Trans World	4	4
12/07/87	Pacific Southwest	43	43
12/21/88	Pan American	270	259

TABLE 9.5
AIRLINES: SCHEDULED SERVICE [1]
ACCIDENTS, FATALITIES AND RATES
(U.S. Air Carriers Operating Under 14 CFR 121)
1982–1991

	1983	1984	1985	1986 [4]	1987 [4]	1988 [4]	1989 [4]	1990 [4]	1991 [4]	1992 [5]
Accidents										
Total	22	13	17	21	32	28	24	24	26	17
Fatal	4	1	4	2	4	3	8	6	4	4
Total Fatalities	15	4	197	5	231	285	131	39	62 [6]	33
Aircraft Hours Flown (000) [2]	6,915	7,736	8,265	9,496	10,116	10,521	10,598	11,525	11,254	11,600
Aircraft Miles Flown (000,000) [2]	2,921	3,259	3,453	3,829	4,126	4,261	4,338	4,696	4,562	4,735
Departures (000) [2]	5,235	5,666	6,069	6,928	7,293	7,347	7,269	7,833	7,553	7,630
Accident Rate Per 100,000 Hours Flown										
Total	0.32	0.17	0.21	0.21	0.31	0.26	0.23	0.21	0.23	0.15
Fatal	0.06	0.01	0.05	0.01	0.03	0.02	0.08	0.05	0.04	0.03
Accident Rate Per Million Miles Flown										
Total	0.01	0.00 [3]	0.00 [3]	0.01	0.01	0.01	0.01	0.01	0.01	0.00 [3]
Fatal	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]	0.00 [3]
Accident Rate Per 100,000 Departures										
Total	0.42	0.23	0.28	0.29	0.43	0.37	0.33	0.31	0.34	0.22
Fatal	0.08	0.02	0.07	0.01	0.04	0.03	0.11	0.08	0.05	0.05

[1] Includes accidents involving deregulated all-cargo air carriers and commercial operators of large aircraft when those accidents occurred during scheduled 14 CFR 121 operations.
[2] Exposure data estimate source: Research and Special Programs Administration.
[3] Rounds to 0.00.
[4] Revised.
[5] Preliminary.
[6] Includes 12 persons killed on a Skywest commuter aircraft and 22 persons killed on an USAir airliner when the two aircraft collided.
Source: National Transportation Safety Board
NOTE: The following suicide/sabotage cases are included in Accidents and Fatalities but not in Accident Rates:

Date	Location	Operator	Total	Aboard
04/02/86	Near Athens, Greece	Trans World	4	4
12/07/87	San Louis Obispo, CA	Pacific Southwest	43	43
12/21/88	Lockerbie, Scotland	Pan American	270	259

TABLE 9.6
AIRLINES: NONSCHEDULED SERVICE [1]
ACCIDENTS, FATATITIES AND RATES
(U.S. Air Carriers Operating Under 14 CFR 121)
1983–1992

	1983	1984	1985	1986[4]	1987[4]	1988[4]	1989[4]	1990[4]	1991[4]	1992[5]
Accidents										
Total	2	4	5	3	4	1	4	2	1	2
Fatal	0	0	3	1	1	0	3	0	0	0
Total Fatalities	0	0	329	3	1	0	147	0	0	0
Aircraft Hours Flown (000)1	384	429	445	481	529	618	676	624	640	630
Aircraft Miles Flown (000,000)1	148	169	178	188	235	243	267	258	263	252
Departures (000)1	209	233	238	274	308	368	376	294	306	360
Accident Rate Per 100,000 Hours Flown										
Total	0.52	0.93	1.13	0.62	0.76	0.16	0.59	0.32	0.16	0.32
Fatal	0.00	0.00	0.68	0.21	0.19	0.00	0.44	0.00	0.00	0
Accident Rate Per Million Miles Flown										
Total	0.01	0.02	0.03	0.02	0.02	0.00[3]	0.02	0.01	0.00[3]	0.01
Fatal	0.00	0.00	0.02	0.01	0.00[3]	0.00	0.01	0.00	0.00	0
Accident Rate Per 100,000 Departures										
Total	0.96	1.72	2.10	1.10	1.30	0.27	1.06	0.68	0.33	0.56
Fatal	0.00	0.00	1.26	0.37	0 32	0.00	0.80	0.00	0.00	0

[1] Includes accidents involving deregulated all-cargo air carriers and commercial operators of large aircraft when those accidents occurred during scheduled 14 CFR 121 operations.
[2] Exposure data estimate source: Research and Special Programs Administration.
[3] Rounds to 0.00.
[4] Revised.
[5] Preliminary.

Source: National Transportation Safety Board

TABLE 9.7
COMMUTER AIR CARRIERS
(Air Carriers Operating under 14 CFR 135)
FATAL ACCIDENTS, FATALITIES
(Preliminary Data)
1992

Location	Operation	Date	Service	Aircraft	Fatalities				Total Aboard	Reported Type of Accident
					Total	Passenger	Crew	Others		
Total				21	13	8	0	26		
Gabriels, NY	USAir Express	Jan 3	Pscr	BE-1900C	2	1	1	0	4	Crashed 5 miles from destination.
Clewiston, FL	Air Sunshine	Jan 23	Pscr	402-C	2	1	1	0	2	Crashed during descent.
Mayaguez, Puerto Rico	American Eagle	June 7	Pscr	Casa 212	5	3	2	0	5	Crashed during approach.
Ft. McClellan, AL	GP Express	June 8	Pscr	C-99	3	2	1	0	6	Crashed during approach.
Saipan, Mariana Islands	Pacific Island	Oct 26	Pscr	310R	3	2	1	0	3	Crashed during initial climb.
Grand Junction, CO	Alpine Air	Oct 31	Pscr	PA-42	3	2	1	0	3	Crashed during decent.
Kiana, AK	Baker Aviation	Nov 8	Pscr	402-C	3	2	1	0	3	Crashed into mountain while enroute.

Source: National Transportation Safety Board

TABLE 9.8
COMMUTER AIR CARRIERS
(U.S. Air Carriers Operating under 14 CFR 135) [1]
AIRCRAFT ACCIDENTS, FATALITIES, AND RATES
1982–1991

	1983[4]	1984	1985	1986[4]	1987[4]	1988[4]	1989[4]	1990[4]	1991[4]	1982[5]
Accidents										
Total	17	22	21	15	32	19	18	15	22	23
Fatal	2	7	7	2	10	2	5	3	8	7
Fatalities	11	48	37	4	59	21	31	6	99[6]	21
Aircraft Hours Flown (000)[2]	1,511	1,746	1,737	1,725	1,946	2,093	2,241	2,337	2,172	2,180
Aircraft Miles Flown (000,000)[2]	254	291	301	307	351	380	394	450	381	408
Departures (000)[2]	2,328	2,677	2,561	2,799	2,810	2,909	2,819	3,160	2,719	2,880
Accident Rate Per 100,000 Hours Flown[3]										
Total	1.13	1.26	1.21	0.87	1.64	0.91	0.80	0.64	1.01	1.01
Fatal	0.13	0.40	0.40	0.12	0.51	0.10	0.22	0.13	0.37	0.32
Accident Rate Per Million Miles Flown[3]										
Total	0.07	0.08	0.07	0.05	0.09	0.05	0.05	0.03	0.06	0.06
Fatal	0.01	0.02	0.02	0.01	0.03	0.01	0.01	0.01	0.02	0.02
Accident Rate Per 100,000 Departures[3]										
Total	0.73	0.82	0.82	0.54	1.14	0.65	0.64	0.48	0.81	0.8
Fatal	0.09	0.26	0.27	0.07	0.36	0.07	0.18	0.10	0.29	0.24

[1] Includes accidents involving deregulated all-cargo air carriers and commercial operators of large aircraft when those accidents occurred during scheduled 14 CFR 121 operations.
[2] Exposure data estimate source: Research and Special Programs Administration.
[3] Rates are based on all accidents including some involving operators not reporting to RSPA.
[4] Revised.
[5] Preliminary.
[6] Includes 12 persons killed on a Skywest commuter aircraft and 22 persons killed on an USAir airliner when the two aircraft collided.

Source: National Transportation Safety Board

TABLE 9.9
ON-DEMAND AIR TAXIS
(U.S. Air Carriers Operating under 14 CFR 135)
AIRCRAFT ACCIDENTS, FATALITIES, AND RATES
1983–1992

Year	Number Of Accidents		Total Fatalities	Aircraft Hours Flown (000) [1]	Accident Rate Per 100,000 Aircraft Hours	
	Total	Fatal			Total Accidents	Fatal Accidents
1983 [2]	141	27	62	2,378	5.93	1.14
1983 [2]	146	23	52	2,843	5.14	0.81
1985 [2]	154	35	76	2,570	5.99	1.36
1986 [2]	117	31	65	2,690	4.35	1.15
1987 [2]	97	30	65	2,657	3.65	1.13
1988 [2]	101	28	59	2,632	3.84	1.06
1989 [2]	111	25	83	3,020	3 68	0.83
1990 [2]	108	28	49	2,245	4.82	1.25
1991 [2]	88	26	73	2,241	3.93	1.16
1992 [3]	74	24	66	2,230	3.32	1.08

[1] Exposure data estimate from FAA.
[2] Revised
[3] Preliminary

Source: National Transportation Safety Board.

TABLE 9.10
U.S. GENERAL AVIATION FLYING
(All Operations other than those Operating under 14 CFR 121 or 14 CFR 135)
AIRCRAFT ACCIDENTS, FATALITIES, AND RATES
1983–1992

Year	Number Of Accidents		Total Fatalities	Aircraft Hours Flown (000) [1]	Accident Rate Per 100,000 Aircraft Hours [2]	
	Total	Fatal			Total Accidents	Fatal Accidents
1983 [3]	3,077	556	1,069	28,673	10.73	1.94
1984 [3]	3,016	545	1,042	29,099	10.35	1.87
1985 [3]	2,738	498	955	28,322	9.66	1.75
1986 [3]	2,582	474	967	27,073	9.54	1.75
1987 [3]	2,494	447	838	26,972	9.24	1.65
1988 [3]	2,386	460	800	27,446	8.69	1.68
1989 [3]	2,233	432	768	27,920	7.98	1.53
1990 [3]	2,218	445	763	28,510	7.78	1.56
1991 [3]	2,143	414	746	27,226	7.87	1.52
1992 [4]	1,956	408	812	27,190	7.19	1.5

[1] Suicide/sabotage accidents are excluded from rates.
[2] Exposure data estimate from FAA.
[3] Revised
[4] Preliminary

Source: National Transportation Safety Board.

X. AERONAUTICAL PRODUCTION AND IMPORTS/EXPORTS

The aircraft production information presented in this chapter was obtained from the Bureau of Census: Complete Aircraft Plant Report (Form M37G). The shipment data shows the number of civil aircraft shipped by the United States manufacturers and includes both aircraft shipped within the United States and those exported.

Import and export data were obtained from the Aerospace Industries Association of America, Inc. and were based on Bureau of the Census data from special monthly compilation of Annual Reports 246 and 446, respectively.

TABLE 10.1
TOTAL CIVIL AIRCRAFT PRODUCTION, WEIGHT, AND COST
CALENDAR YEARS 1983–1992

Calendar Year	Number of Aircraft	Value Complete Aircraft ($000)	Average Complete Aircraft Cost
1983	2,784	9,915,761	3,561,696
1984	2,635	7,911,543	3,002,483
1985	2,457	10,939,831	4,452,516
1986	2,888	12,517,992	4,334,485
1987	2,319	12,491,743	5,386,394
1988	2,681	16,019,855	5,975,328
1989	3,129	17,467,335	5,582,402
1990	2,785	24,864,289	8,927,931
1991	2,867	29,780,358	10,387,289
1992	2,517	31,733,026	12,607,480

Source: U.S. Department of Commerce, Bureau of the Census, Industry Division.

TABLE 10.2
NUMBER OF SHIPMENTS OF COMPLETE CIVIL AIRCRAFT
1983–1992

Item	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
Total	2,517	2,867	2,785	3,129	2,681	2,319	2,888	2,842	3,028	3,217
Fixed Wing	1,539	1,598	1,759	2,014	1,734	1,516	1,858	2,457	2,635	2,784
Rotorcraft	308	574	582	603	517	360	493	385	393	433
Other	670	695	444	512	430	443	537	NA	NA	NA

NOTE: Other includes balloons, dirigibles, airships, gliders, sailplanes, and aircraft sold in kits (except hang gliders).

Source: Current Industrial Reports: Complete Aircraft and Aircraft Engines, M37G-13; Department of Commerce, Bureau of the Census.

TABLE 10.3
NUMBER OF U.S. IMPORTS OF CIVIL AEROSPACE PRODUCTS
1983–1992

Item	1988	1987	1986	1985	1984	1983
Aircraft Used or Rebuilt, Civil	194	115	141	246	223	181
Helicopters, Civil	114	98	87	60	61	100
Aircraft, Single-Engine, Civil	40	41	71	46	21	6
Aircraft, Multiengine Under 4,400 lbs., Civil	3	1	18	8	33	18
Aircraft, Multiengine, 4,400 to 10,000 lbs., Civi	74	101	58	46	58	52
Aircraft, Multiengine, 10,000 to 33,000 lbs Civil	152	155	150	103	95	93
Aircraft, Multiengine, Over 33,000 lbs., Civil	18	22	36	29	12	7
Balloons, and Airships, Civil	0	0	0	0	0	0
Gliders, Civil	111	117	181	628	448	229

NOTE: Categories were changed to reflect Commerce Department's change to the Harmonized Trade Schedule. Historical data are not available in these new categories.

Item	1992	1991	1990	1989
Complete Aircraft	946	955	1,262	674
Transports	64	44	30	36
Passenger	64	44	30	33
Cargo	—	—	—	—
Other Combinations	—	—	—	3
General Aviation	216	254	743	213
Single Engine	67	72	522	59
Multi Engine	149	182	221	154
Small	7	1	5	1
Medium	18	41	53	27
Large	124	140	163	126
Turbojet/Turbofan	52	45	63	39
Others	72	95	100	87
Helicopters	148	244	167	124
Small	3	4	21	9
Large	145	240	146	115
Others	521	413	322	301
Used/Rebuilt	176	246	130	210
New	345	167	192	91

Source: Aerospace Industries Association, Inc. based on Bureau of Census data from special monthly compilation of Annual Report, FT-410.

TABLE 10.4
NUMBER OF U.S. EXPORTS OF CIVIL AEROSPACE PRODUCTS
1983–1992

Item	1988	1987	1986	1985	1984	1983
Aircraft Used or Rebuilt, Civil	1,644	969	494	277	304	224
Aircraft Helicopter, New, Under 2200 lbs., Civil	161	129	104	68	155	141
Aircraft, Helicopter, New, Over 2200 lbs., Civil	119	152	106	69	78	75
Aircraft, Single-Engine New Civil	459	307	220	334	271	279
Aircraft, Multiengine, New, Under 4400 lbs., Civil	51	51	63	66	53	106
Aircraft, Multiengine, New, Over 4400 lbs., Under 10,000 lbs., Civil	109	127	93	65	83	112
Aircraft, Multiengine, New, Over 10,000 lbs., Under 33,000 lbs., Civil	24	24	38	19	18	22
Aircraft, Passenger, New, Over 33,000 lbs., Civil	205	160	149	140	77	122
Aircraft, Cargo, New, Over 33,000 lbs., Civil	8	4	2	6	3	2
Aircraft Other, New, Over 33,000 lbs., Including Combinations, Civil	4	6	8	6	3	5
Aircraft Other, New, Including Balloons, Gliders & Kites, Civil	0	0	0	0	0	0

NOTE: Categories were changed to reflect Commerce Department's change to the Harmonized Trade Schedule. Historical data are not available in these new categories.

Item	1992	1991	1990	1989
Complete Aircraft	2,374	4,204	4,814	6,452
Transports	387	385	297	260
Passenger	376	371	294	256
Cargo	1	5	3	1
Other Combinations	10	9	0	3
General Aviation	358	534	1,144	1,597
Single Engine	186	345	896	1,406
Multi Engine	172	189	248	191
Small	19	22	33	39
Medium	93	98	136	104
Large	60	69	79	48
Turbojet/Turbofan	59	58	63	35
Others	1	11	16	13
Helicopters	212	318	349	294
Small	175	246	266	186
Large	37	72	83	108
Others	1,417	2,967	3,024	4,301
Used/Rebuilt	1,031	1,834	1,911	1,700
New	386	1,133	1,113	2,601

Source: Aerospace Industries Association, Inc. based on Bureau of Census data from special monthly compilation of Annual Report, FT-410.

COMMON ACRONYMS

AAS	Airport Advisory Service
ADF	Automatic Direction Finder
ARSR	Air Route Surveillance Radar
ARTCC	Air Route Traffic Control Center
ASR	Airport Surveillance Radar
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
CAB	Civil Aeronautics Board
DME	Distance Measuring Equipment
DVFR	Defense Visual Flight Rules
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FSS	Flight Service Station
ICAO	International Civil Aviation Organization (Montreal, Canada)
IFR	Instrument Flight Rules
IFSS	International Flight Service Station
ILS	Instrument Landing System
LDA	Landing Directional Aid
LRNAV	Long Range Navigation
MLS	Microwave Landing System
NAS	National Airspace System
NAVAIDS	Navigation Aids
NOTAMS	Notice to Airmen
NTSB	National Transportation Safety Board
RNAV	Area Navigation
RSPA	Research and Special Programs Administration
VFR	Visual Flight Rules
VHR	Very High Frequency
VOR/VORTAC	Very High Frequence Omnidirectional Radio Range

GLOSSARY

Active Aircraft—All legally registered civil aircraft which flew one or more hours.

Aerial Application—See Primary Use.

Aerial Observation—See Primary Use.

Air Carriers—The commercial system of air transportation consisting of the certificated air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs.

Certificated air carrier—An air carrier holding a Certificate of Public Convenience and Necessity issued by DOT to conduct scheduled services interstate. Nonscheduled or charter operations may also be conducted by these carriers. These carriers operate large aircraft (30 seats or more or a maximum payload capacity of 7,500 pounds or more) in accordance with FAR Part 121.

Air taxi—A classification of air carriers which transports in accordance with FAR part 135 persons, property, and mail using small aircraft (under 30 seats or a maximum payload capacity of less than 7,500 pounds)

Commuter air carrier—an air taxi operator which performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the week, and points between which such flights are performed.

Supplemental air carrier (Charter)—An air carrier which holds Certificates of Public Convenience and Necessity issued by the DOT, authorizing performance of passenger and cargo interstate charter services supplementing the scheduled service of the certificated air carriers. The authority of supplemental air carriers to engage in military charters is of an indefinite period. In addition, they can perform on an emergency basis, as may be authorized by the DOT, scheduled operations including the transportation of individually ticketed passengers and individually waybilled cargo.

Commercial operator—a person who for compensation or hire engages in the intrastate carriage of aircraft in air commerce of persons or property other than as an air carrier or foreign air carrier.

Commercial operator of large aircraft—commercial operator operating aircraft with 30 seats or more or a maximum payload capacity of 7,500 pounds or more.

Aircraft Accident—As defined by the National Transportation Safety Board, it is "an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, and in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto, or in which the aircraft receives substantial damage."

Fatal Injury means any injury which results in death within 7 days of the accident.

Operator means any person who causes or authorizes the operation of an aircraft, such as the owner, leasee, or bailee of an aircraft.

Serious Injury means any injury which (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) involves lacerations which cause severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Substantial damage:

Except as described below, substantial damage means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component.

Exceptions: engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes or wingtips are not considered substantial for the purpose of this part.

Aircraft Contact—Aircraft with which the flight service stations (FSS) have established radio communications contact. One count is made for each enroute, landing, or departing aircraft contacted by an FSS regardless of the number of contacts made with an individual aircraft during the same flight. A flight contacting five FSS's would be counted as five aircraft contacted.

Aircraft Handled—See IFR Aircraft Handled.

Aircraft Type—A term used in this publication in grouping aircraft by basic configuration—fixed—wing, rotorcraft, glider, dirigible, and balloon.

Airline Transport Pilot—See Pilot.

Airman—A pilot, mechanic, or other licensed aviation technician.

Airman Certificate—A document issued by the Administrator of the Federal Aviation Administration certifying that the holder complies with the regulations governing the capacity in which the certificate authorizes the holder to act as an airman in connection with aircraft.

Airport—An area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.

Airport Advisory Service (AAS)—A service provided by flight service stations at airports not served by a control tower. This service consists of providing information to landing and departing aircraft concerning wind direction and velocity, favored runway, altimeter setting, pertinent known traffic, pertinent known field conditions, airport taxi routes and traffic patterns, and authorized instrument approach procedures.

Airport Operation—an aircraft takeoff or landing. There are two types of operations—local and itinerant.

Local operations are performed by aircraft which:

(a) Operate in the local traffic pattern or within sight of the airport.

(b) Are known to be departing for, or arriving from, flight in local practice areas within a 20-mile radius of the airport.

(c) Execute simulated instrument approaches or low passes at the airport.

Itinerant operations are all airport operations other than local operations.

Airport Traffic—Aircraft operating in the air or on an airport surface exclusive of loading ramps and parking areas.

Airport Traffic Control Service—Air traffic control service provided by an airport traffic control tower for aircraft operating on the movement area and in the vicinity of an airport.

Airport Traffic Control Tower (ATCT)—A central operations facility in the terminal air traffic control system, which consist of a tower cab structure, including an associated IFR room if radar equipped, and uses air/ground

communications, radar, visual signaling, and other services to provide safe and expeditious movement of terminal air traffic.

Airports Grants-in-Aid Program—A grant of funds by the Secretary of Transportation under the Airport & Airway Improvement Act of 1982 to a sponsor for the accomplishment of one or more projects.

Project—Projects (or separate projects submitted together) for the accomplishment of airport development or airport planning, including the combined submission of all projects which are to be undertaken at an airport in a fiscal year.

Sponsor—Any private owner of a public-use air OR any public agency (either individually or jointly with other public agencies) that submit to the Secretary of Transportation, in accordance with the Airport & Airway Improvement Act of 1982, an application for financial assistance.

Primary Airports—A commercial service airport which is determined to have .01 percent or more of the total number of passengers enplaned annually at all commercial service airports.

Commercial Airports—(also known as commercial service airports)—A public airport which is determined to enplane annually 2,500 or more passengers and receive scheduled passenger service of aircraft.

Reliever Airports—An airport designated as having the function of relieving congestion at a commercial service airport and providing more general aviation access to the overall community.

General Aviation Airports—(also known as public airports)—Any airport which is used or to be used for public purposes, under the control of a public agency, the landing area of which is publicly owned.

System Planning—(also known as integrated airport system planning)—The initial, as well as continuing development for planning purposes of information and guidance to determine the extent, type, nature, location, and timing of airport development needed in a specific area to establish a viable balanced, and integrated system of public-use airports.

Airports of Entry—Aircraft may land at these airports without prior permission to land from U.S. Customs.

Air Route Traffic Control Center (ARTCC)—A facility established to provide air traffic control service to aircraft operating on IFR flight plans within controlled airspace, and principally during the enroute phase of flight.

Air Taxi—See Air Carrier and Primary Use.

Air Traffic Control (ATC)—A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

Air Traffic Control Facility—A facility which provides air traffic control services located in the U.S., its possessions and territories, and in foreign countries especially established by international agreement.

Air Traffic Hub—Air traffic hubs are not airports; they are the cities or twin cities requiring aviation services. The hubs fall into four classes as determined by each community's percentage of the total enplaned passengers all services and all operations U. S. certificated air carriers in the 50 States, the District of Columbia, and other U.S. areas.

Large air traffic hub—a community enplaning 1.00 percent or more of the total enplaned passengers.

Medium air traffic hub—a community enplaning from 0.25 to 0.99 percent of the total enplaned passengers.

Small air traffic hub—a community enplaning from 0.05 to 0.24 percent of the total enplaned passengers.

Nonhub—a community enplaning less than 0.05 percent of the total enplaned passengers.

American Flag Carrier—See U.S. Flag Carrier.

Approach Control Facility—A terminal area traffic control facility providing approach control service.

Approach Control Service—Air traffic control service provided by an approach control-facility for arriving and departing aircraft and, on occasion, tower enroute control service.

Business Transportation—See Primary Use.

Carrier Group—A grouping of certificated air carriers determined by annual operating revenues as shown below:

Carrier Group	Annual Operating Revenues
Majors	$1,000,000,000+
Nationals	$100,000,000 - $1,000,000,000
Large regionals	$10,000,000 - $99,999,999
Medium regionals	0 - $9,999,999 or that operate aircraftwith 60 or less seats or maximum payload capacity of 18,000 lbs.

Certificated Route Air Carrier—See Air Carrier.

Commercial Operator—See Air Carrier.

Commercial Pilot—See Pilot.

Commuter Air Carrier—See Air Carrier.

Defense Visual Flight Rules (DVFR)—A flight within an Air Defense Identification Zone conducted under the visual flight rules in Federal Aviation Regulation, Part 99.

Domestic Operations—In general, operations within and between the 50 States, and the District of Columbia.

Executive Transportation—See Primary Use.

Flight Plan—Specified oral or written information about the intended flight of an aircraft that is filed with air traffic control.

Flight Service Station (FSS)—Air traffic Service facilities within the National Airspace System (NAS) which provide preflight pilot briefings and en route communications with VFR flights, assist lost IFR/VFR aircraft, assist aircraft having emergencies, relay Air Traffic Control clearances, originate, classify, and disseminate Notices to Airmen, broadcast aviation weather and NAS information, receive the close flight plans, monitor radio NAVAIDS, notify search and rescue units of missing VFR aircraft, and operate the national weather teletypewriter system. In addition, at selected locations, FSSs take weather observations, issue airport advisories, administer airmen written examinations, and advise Customs and Immigration of across-the-border flights.

Flight Services—The sum of flight plans originated and pilot briefs, multiplied by two, plus the number of aircraft contacted. See tables 2.6 and 2.14.

Foreign Flag Air Carrier—An air carrier other than a U.S. flag air carrier engaged in international air transportation (see also U.S. Flag Carrier).

Foreign Mail—Mail transported outside the United States by U.S. flag carriers for a foreign government.

General Aviation—That portion of civil aviation which encompasses all facets of civil aviation except air carriers.

Heliport—An area of land, water, or any structure used or intended to be used for the landing and takeoff of helicopters.

Hub—See Air Traffic Hub.

IFR Aircraft Handled—The number of IFR departures multiplied by two plus the number of IFR overs. This definition assumes that the number of departures (acceptances, extensions, and originations of IFR flight plans) is equal to the number of landings (IFR flight plans closed).

IFR Departure—An IFR departure includes IFR flights originating in center's area, accepted by the center under SOLE EN ROUTE clearance procedures, and extended by the center.

IFR Over—An IFR flight that originates outside the ARTCC area and passes through the area without landing.

Inactive Aircraft—All legally registered civil aircraft which flew zero hours.

Instructional Flying—See Primary Use.

Instrument Approach—An approach to an airport, with intent to land, by an aircraft flying in accordance with an IFR flight plan, when the visibility is less than 3 miles and/or when the ceiling is at or below the minimum initial altitude.

Instrument Flight Rules (IFR)—Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.

Instrument Landing System (ILS)—A precision instrument approach system which normally consists of the following electronic and visual aids:

Localizer—Provides course guidance to the runway.

Glide Slope—Provides vertical guidance during approach.

Marker Beacon—Provides aural and/or visual identification of a specific position along an instrument approach landing.

Instrument Operation—An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility or air route traffic control center.

International Flight Service Station (IFSS)—A central operations facility in the flight advisory system, staffed and equipped to control aeronautical point-to-point telecommunications, and air-ground telecommunications with pilots operating over international territory or waters, which provides flight plan following, weather information, search and rescue action, and other flight assistance operations.

International Operations—In general, operations outside the territory of the U.S., including operations between the U.S. and foreign countries, and the U.S. and its territories or possessions. Includes both the combination passenger/cargo carrier and the all-cargo carriers engaged in international and territorial operations.

Itinerant Operation—See Airport Operation.

Jet Route—A route designed to serve aircraft operations from 18,000 feet to 45,000 feet.

Landing Rights Airports—Any aircraft may land at one of these airports after securing prior permission to land from U.S. Customs.

Large Air Traffic Hub—See Air Traffic Hub.

Large Regional Carrier—See Carrier Groups.

Large Certificated Air Carrier—Carrier holding a certificate issued under section 401 of the Federal Aviation Act of 1958 and operating aircraft designed to have a maximum passenger seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds, or conducting international operations.

Local Operation—See Airport Operation.

Major Carriers—See Carrier Groups.

Medium Air Traffic Hub—See Air Traffic Hub.

Medium Regional Carrier—See Carrier Groups.

Microwave Landing System (MLS)—An instrument landing system operating in the microwave spectrum which provides lateral and vertical guidance to aircraft having compatible avionics equipment.

National Carriers—See Carrier Groups.

Nonhub—See Air Traffic Hub.

Notice to Airmen—A notice containing information concerning the establishment, condition or change in any component of, or hazard in the National Airspace System, the timely knowledge of which is essential to personnel concerned with flight operations.

Other—See Primary Use.

Other Work Use—See Primary Use.

Over—See IFR Over.

Personal Flying—See Primary Use.

Pilot—

Student Pilot—A student pilot may not operate an aircraft that is carrying a passenger or that is carrying property for compensation or hire.

Private Pilot—A private pilot may not act as a pilot-in-command of aircraft that is carrying passengers for compensation or hire nor act as pilot-in-command in an aircraft that is being operated for compensation or hire (e. g.; one that has been hired to do pipeline patrol but carries no passengers.)

Commercial Pilot—A commercial pilot may act as pilot-in-command of an aircraft carrying passengers for compensation or hire and act as pilot-in-command in an aircraft that is being operated for compensation or hire (e. g.; one that has been hired to do pipeline patrol but carries no passengers.)

Airline Transport Pilot—An airline transport pilot may act as a pilot-in-command of an aircraft engaged in air carrier service.

Pilot Briefing—Information furnished a pilot to assist in flight planning. Principal items are weather conditions, notices to airmen, routes, and preparation and handling of the flight plan.

Primary Use—The use category in which an aircraft flew the most hours. The eleven use categories are defined below:

Aerial Application—Any use of an aircraft for work purposes which concerns the production of foods, fibers, and health control in which the aircraft is used in lieu of farm implements or ground vehicles for the particular task accomplished. This includes fire fighting operations, the distribution of chemicals or seeds in agriculture, reforestation, or insect control.

Aerial Observation—Any use of an aircraft for aerial mapping/photography, survey, patrol, fish spotting, search and rescue, hunting, highway traffic advisory, or sightseeing; not included under Part 135.

Commuter Air Carrier—An air taxi that performs at least five scheduled round trips per week between two or more points or carries mail.

Demand Air Taxi—Use of an aircraft operating under Federal Aviation Regulations, Part 135, passenger and cargo operations, including charter and excluding commuter air carrier.

Business Transportation—Use of an aircraft not for compensation or hire by individuals for the purposes of transportation required by business in which they are engaged.

Executive/Corporate Transportation—Any use of an aircraft by a corporation, company, or other organization for the purposes of transporting its employees and/or property not for compensation or hire, and employing professional pilots for the operation of the aircraft.

Instructional Flying—Any use of an aircraft for the purpose of formal instruction with the flying instructor aboard, or with the maneuvers on the particular flight(s) specified by the flight instructor; excludes proficiency flying.

Personal Flying—Any use of an aircraft for personal purposes not associated with a business or profession, and not for hire. This includes maintenance of pilot proficiency.

Other Work Use— Any aircraft used for construction work (not included under Part 135), helicopter, hoist, towing gliders, or parachuting.

Other—Any other use of an aircraft not included above. (Example: experimentation, R&D: testing, demonstration, government).

Private Pilot—See Pilot.

Private-Use Airport—An airport which is not open for the use of the general public.

Privately Owned Airport—An airport which is owned by a private individual or corporation.

Public-Use Airport—An airport open to for public use without prior permission, and without restrictions within the physical capacities of available facilities. May or may not be publicly owned.

Publicly Owned Airport—An airport which is publicly owned and under control of a public agency.

Small Air Traffic Hub—See Air Traffic Hub.

Small Certificated Air Carrier—Carrier holding a certificate issued under section 401 of the Federal Aviation Act of 1958 and operating aircraft designed to have a maximum seating capacity of 60 or less seat or a maximum payload of 18,000 pounds or less.

Stolport—An airport specifically designed for STOL (Short Take-off and Landing) aircraft, separate from conventional airport facilities.

Student Pilot—See Pilot.

Supplementat Air Carrier—See Air Carrier.

Terminal Area—A general term used to describe airspace in which approach control service or airport traffic control service is provid·:d.

Tower—See Airport Traffic Control Tower.

U.S. Flag Carrier or American Flag Carrier—One of a class of air carriers holding a Certificate of Public Convenience and Necessity issued by the DOT, approved by the President, authorizing scheduled operations over specified routes between the United States (and/or its territories) and one or more foreign countries. (See also Foreign Flag Air Carrier.)

VFR Flight—Flight conducted in accordance with Visual Flight Rules.

VOR—Very high frequency omnidirectional radio range. Used as the basis for navigation in the national Airspace System.

VORTAC—A navigation aid providing azimuth and distance measuring equipment as one site.